



Giovanni Colombo
Giuseppe Vigliotti

Drawing the Human Head

Anatomy, Expressions,
Emotions and
Feelings

promopress

GIOVANNI COLOMBO was born in Como, Italy, in 1961. After attending a lyceum for the arts, he enrolled in the Accademia di Belle Arti di Brera in Milan to study painting. In the early 1980s, he attended the studio of A. Tenchio to deepen his knowledge of engraving, where he met and became friends with many other artists and started working in illustration in addition to painting. In 1982 he began showing his artwork, in both group and individual shows, and in 1988 he started to teach painting at the "Fausto Melotti" State Art School in Cantù, Italy - where he still works today. He wrote *Percezione & Disegno: dalla visione alla rappresentazione* (Perception & Drawing: From Vision to Representation; Ikon, Milan, 1998). He has published several limited edition booklets and engravings. Today he lives and works in Como.

GIUSEPPE VIGLIOTTI was born in Estavayer Le Lac, Switzerland, in 1965 and currently teaches painting. In 1983 he received his diploma from a fine arts secondary school, and in 1986 his work was shown in numerous exhibitions, both group and individual. Since 1987 he's worked as a freelance illustrator and graphic designer for numerous publishers. In 1988 received his degree in painting at the Accademia di Belle Arti di Brera in Milan. From 2007 to 2010 he worked in art publishing, with specific experience relating to artists' books and the use of graphic design software, editorial layout and website creation. His current artistic focus is on video-installations, multimedia techniques and computer graphics. Today he lives and works in Como.

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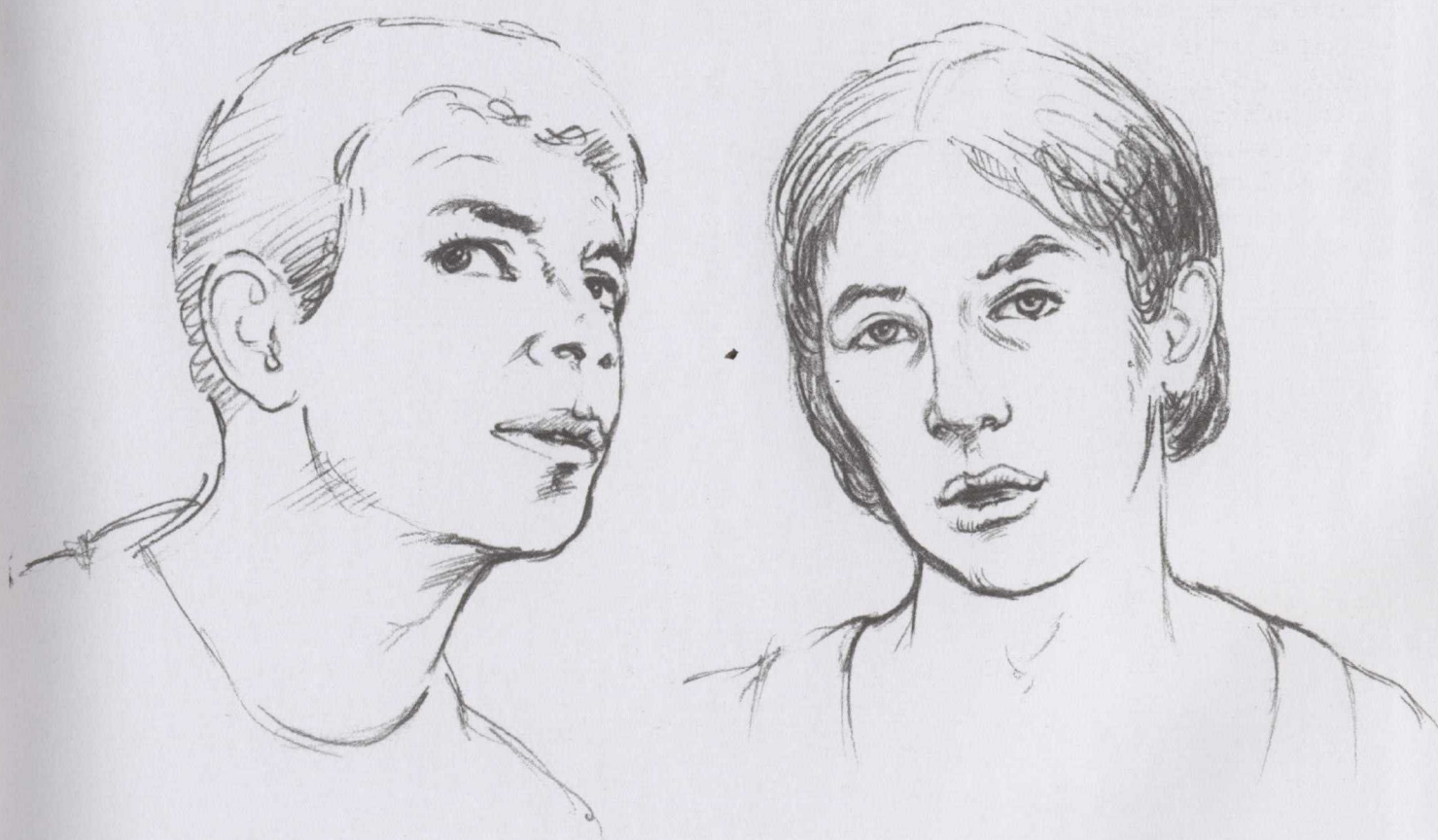
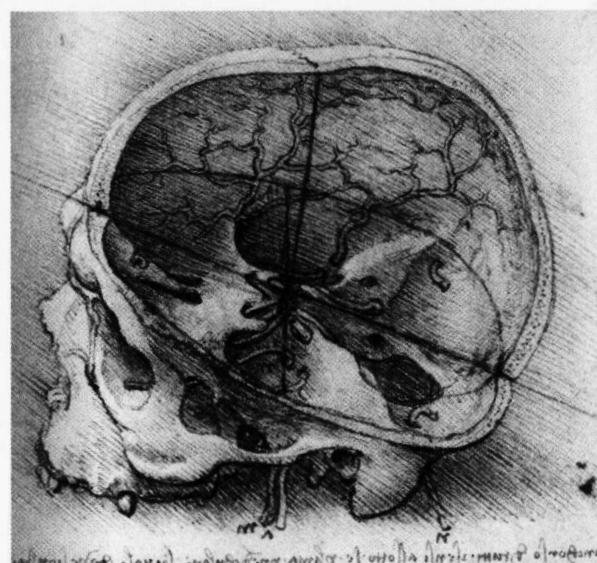
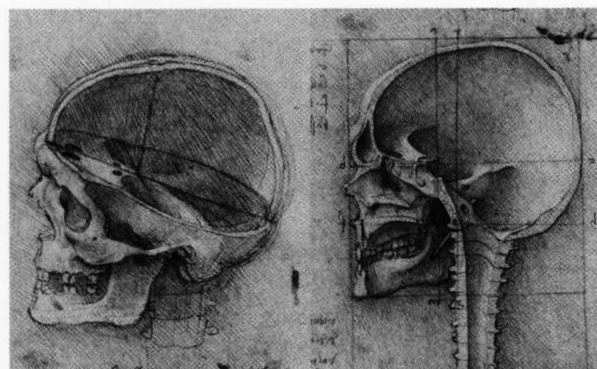
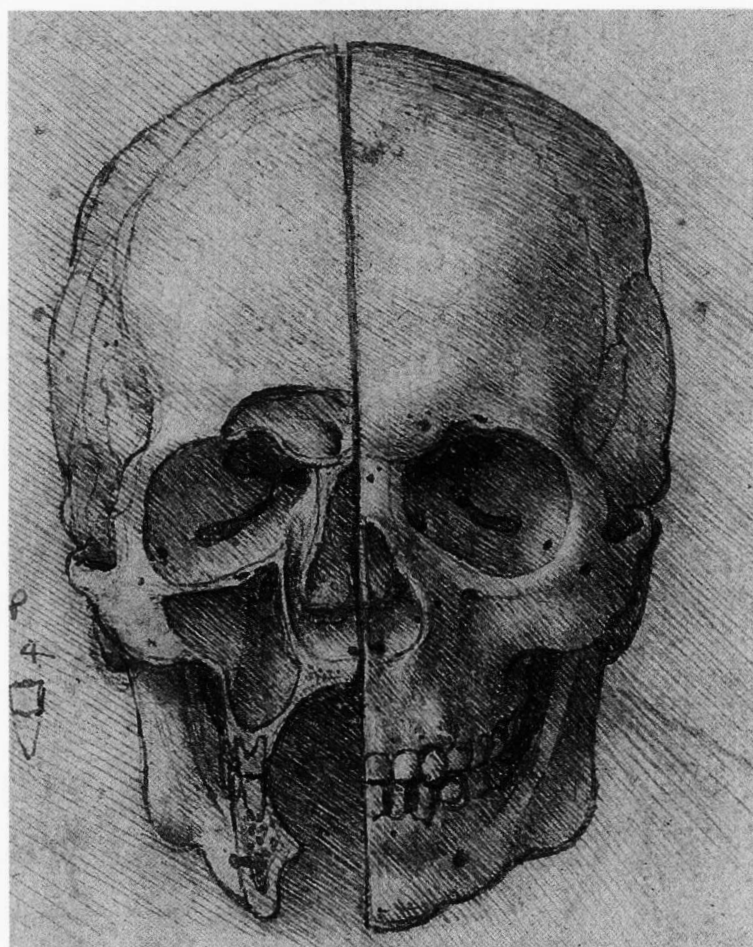


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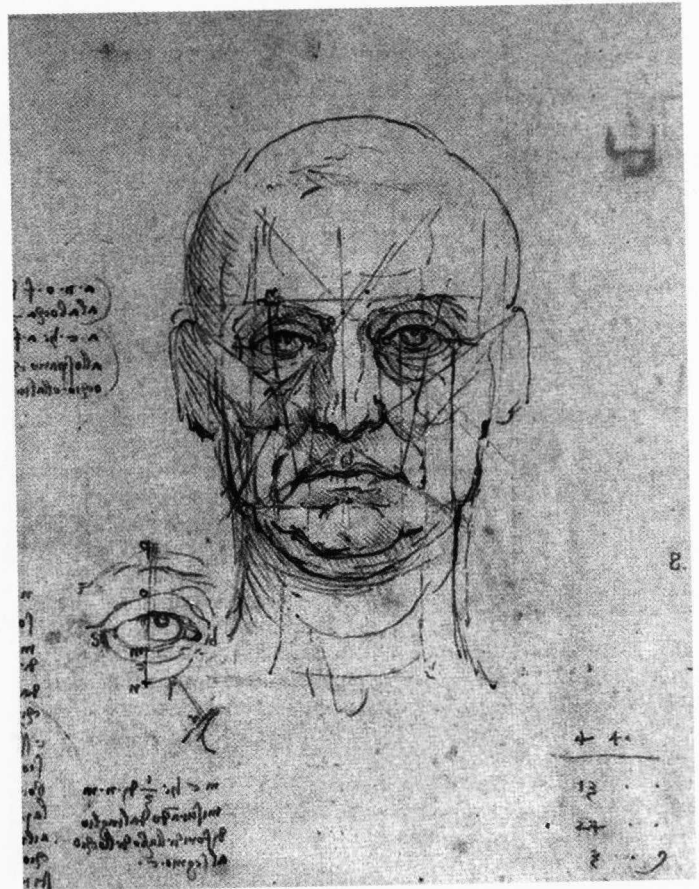
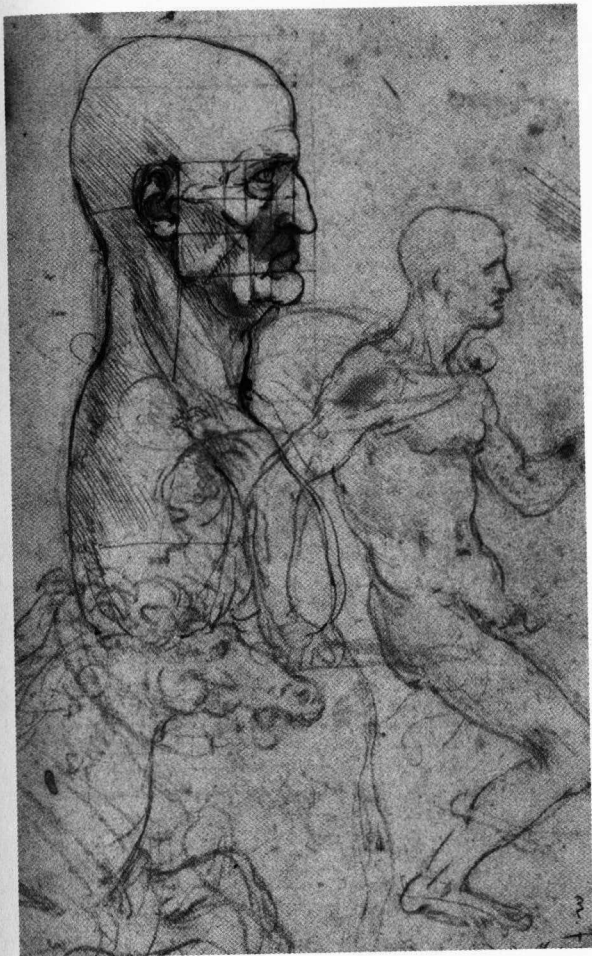
3 THE ANATOMY AND PHYSIOGNOMY OF THE HEAD



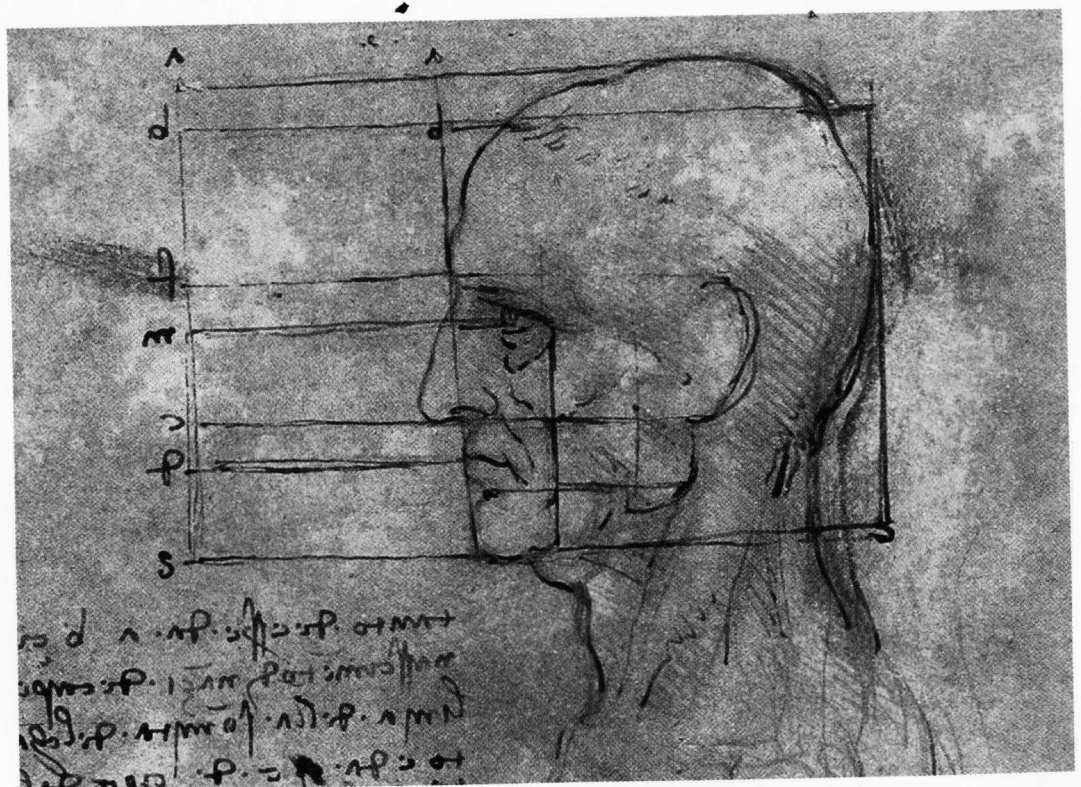
Gestural expressions of emotion is determined by facial muscles. The human face is able to produce a few dozen facial expressions, which are associated, alone or in combination with each other, to a set number of emotions. Facial expression muscles are small and flat; they are attached directly or indirectly to the skull and connect to the skin on the face. They don't simply move independently of one another: when one con-

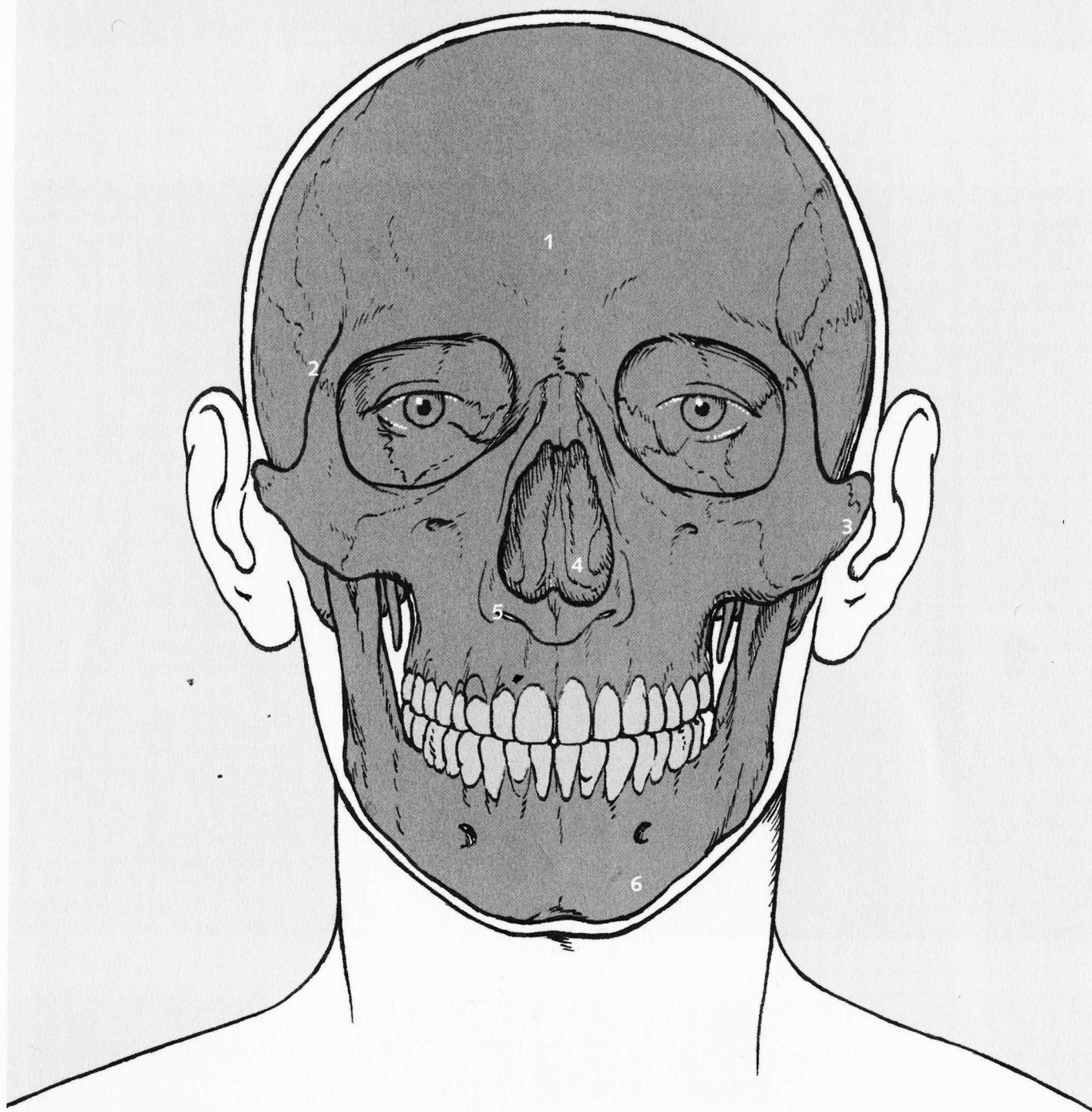
tracts, it stimulates the movement of a series of other muscles, which have assisting or opposing functions. Another general rule is that wrinkles on facial skin always are in the opposite direction of the muscle which produces them, but this rule is often changed depending on bone structure or other anatomical particularities. You can clearly see this by observing the contraction of the frontalis (in "fear" expressions, we note the

maximum contraction of the muscles - see the *Fear/Pain* section). In any case, the expressions of one's emotional state are not executed through the contraction of a single muscle. Even if facial gestures appear localised, the dominant muscle of the expression must always be coordinated other muscles near and far.



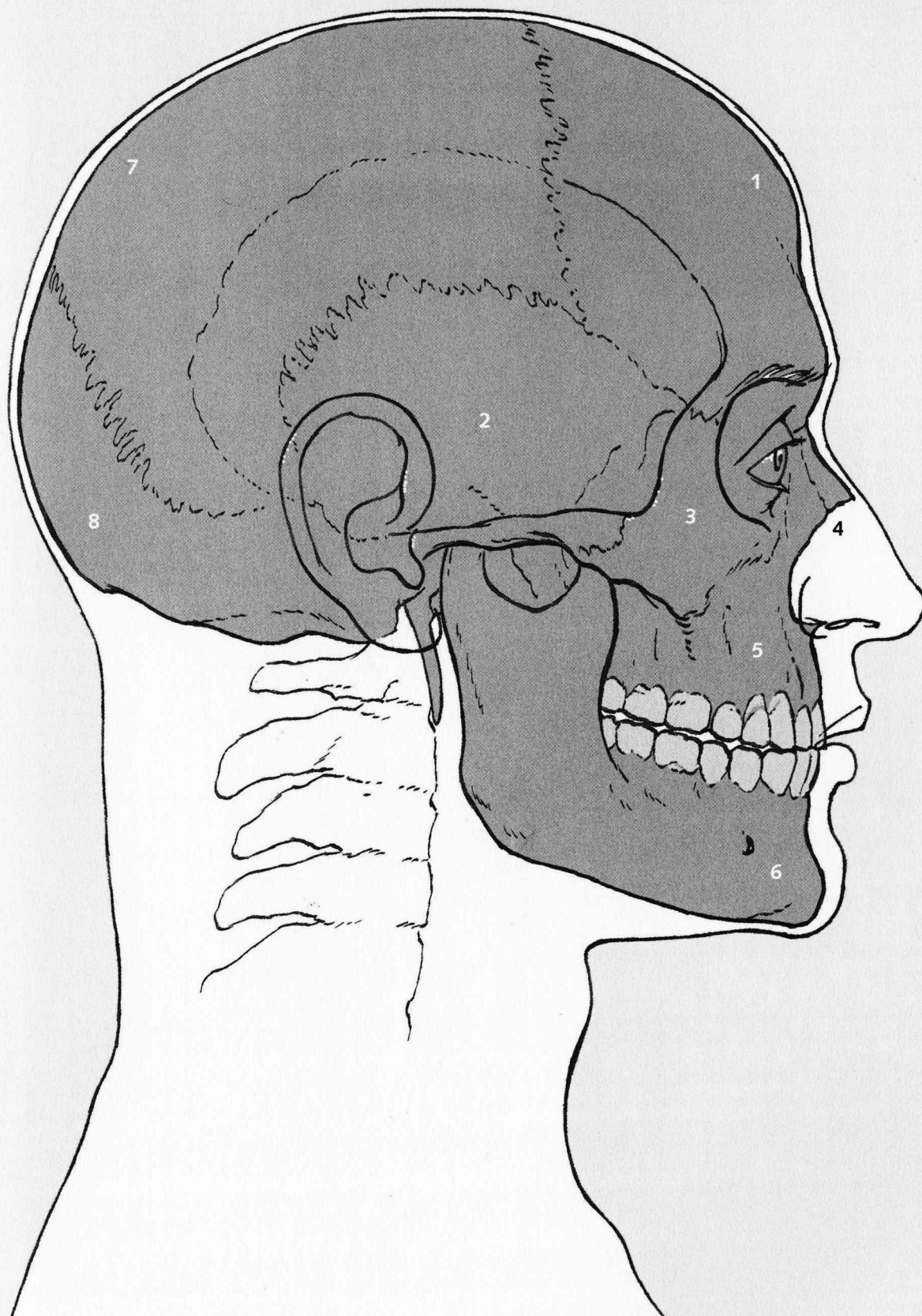
This and previous page: anatomical and proportional studies of the head by Leonardo da Vinci, c. 1488-89





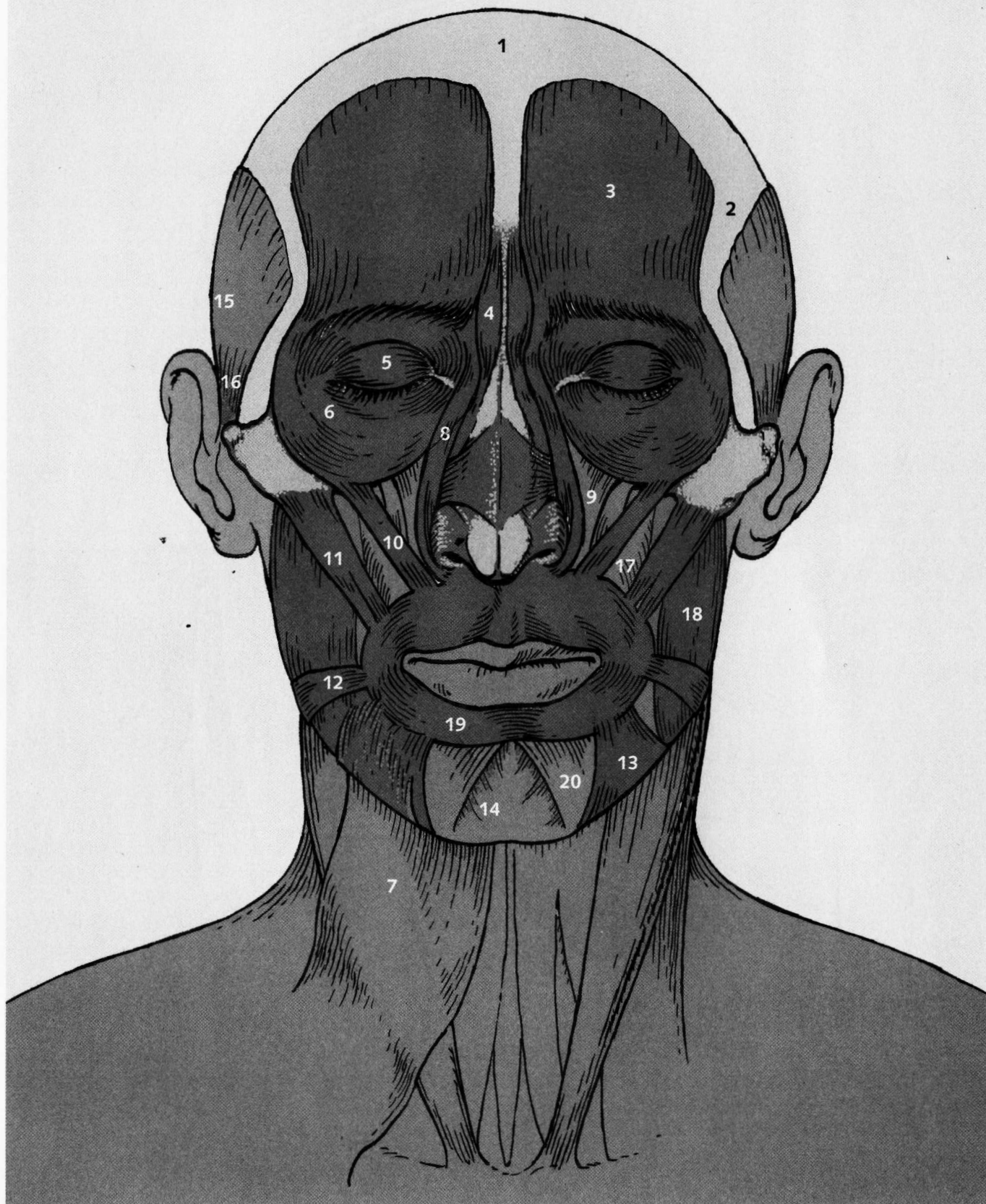
The skull (front view)

1) frontal bone 2) temporal bone 3) zygomatic bone 4) nasal cavity 5) maxilla 6) mandible



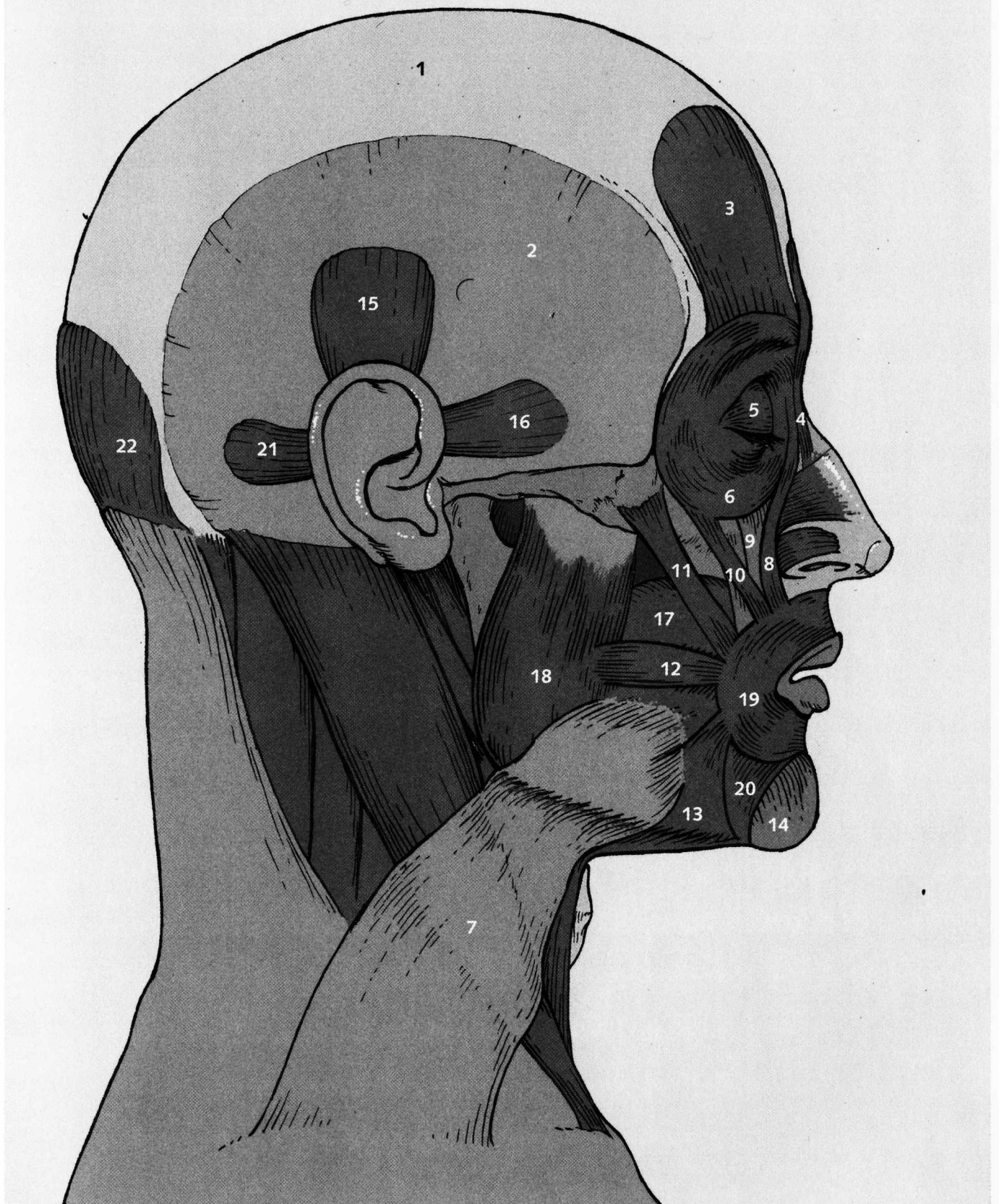
The skull (side view)

1) frontal bone 2) temporal bone 3) zygomatic bone 4) nasal cavity 5) maxilla 6) mandible 7) parietal bone
8) occipital bone



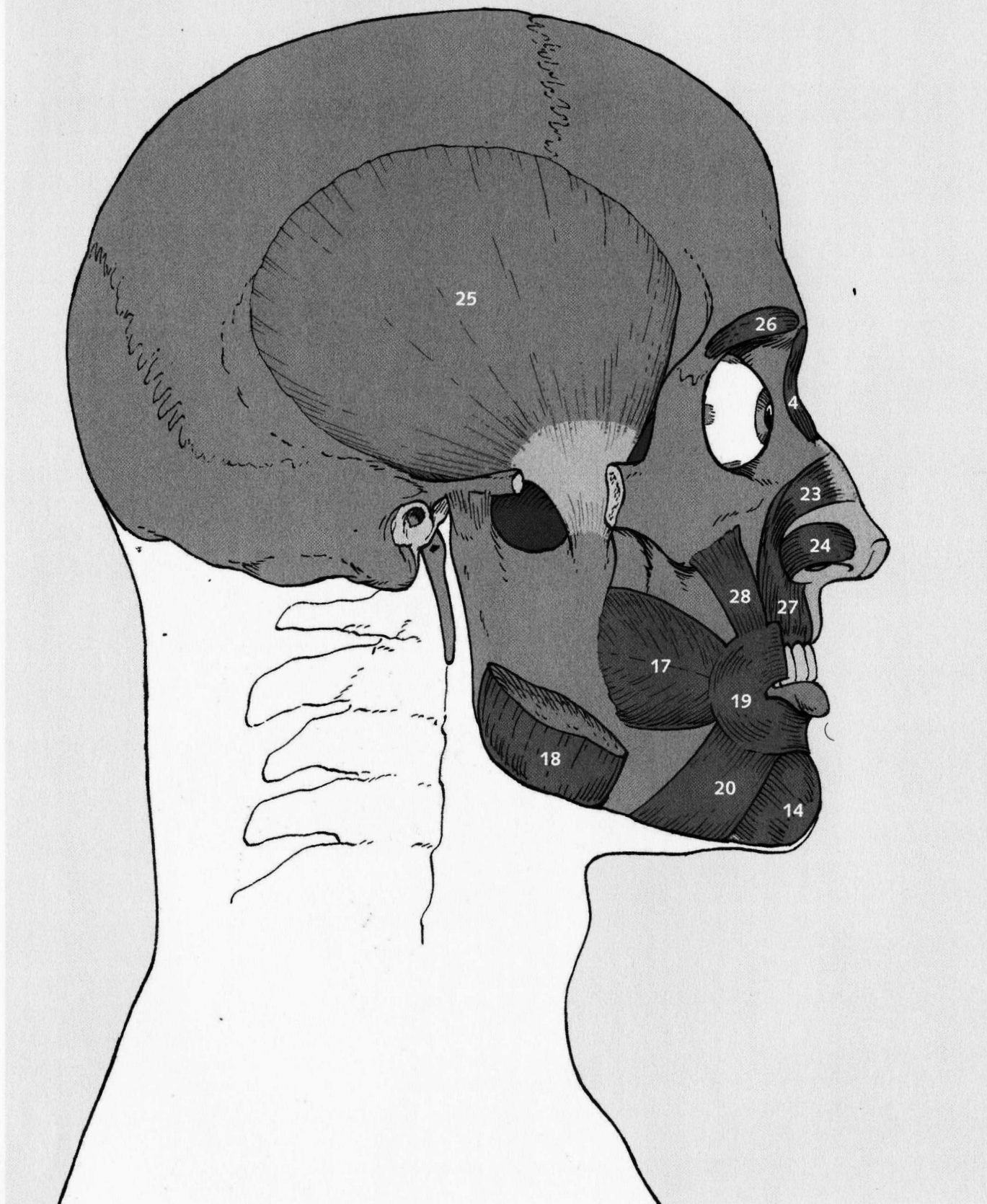
Superficial facial muscles (front view)

1) galea aponeurotica 2) temporal fascia 3) frontalis 4) procerus 5) orbicularis oculi (palpebral portion) 6) orbicularis oculi (orbital portion) 7) platysma 8) levator labii superioris (alaeque nasi) 9) levator labii superioris 10) zygomaticus minor 11) zygomaticus major 12) risorius 13) depressor anguli oris 14) mentalis 15) auricularis superior 16) auricularis anterior 17) buccinator 18) masseter 19) orbicularis oris 20) depressor labii inferioris



Superficial facial muscles (side view)

1) galea aponeurotica 2) temporal fascia 3) frontalis 4) procerus 5) m orbicularis oculi (palpebral portion) 6) orbicularis oculi (orbital portion) 7) platysma 8) levator labii superioris (alaeque nasi) 9) levator labii superioris 10) zygomaticus minor 11) zygomaticus major 12) risorius 13) depressor anguli oris 14) mentalis 15) auricularis superior 16) auricularis anterior 17) buccinator 18) masseter 19) orbicularis oris 20) depressor labii inferioris 21) auricularis posterior 22) occipital



Deep facial muscles (side view)

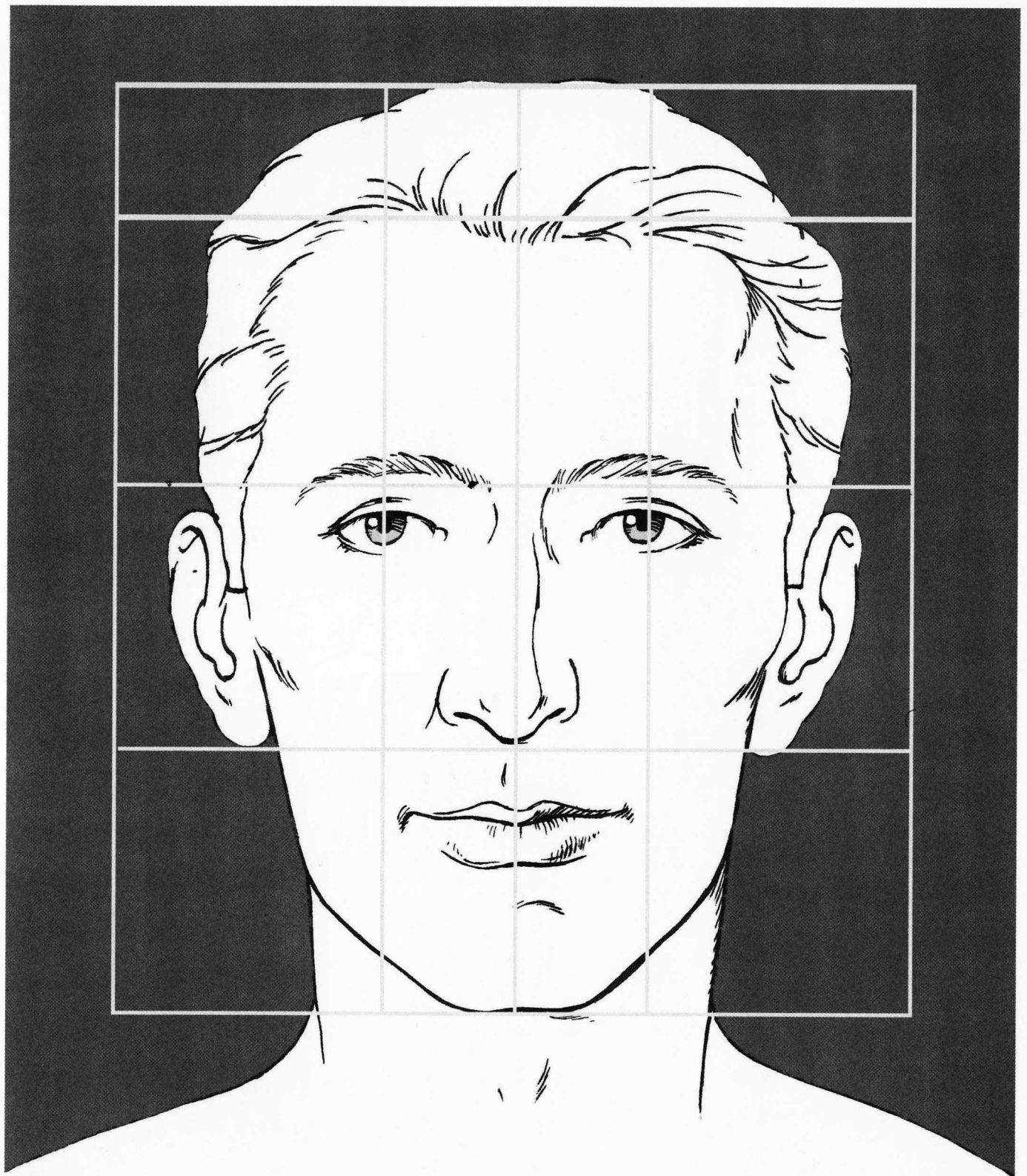
4) procerus 14) mentalis 17) buccinator 18) masseter (resected) 19) orbicularis oris 20) depressor labii inferioris 23) transverse part of nasalis muscle 24) alar nasalis 25) temporalis 26) corrugator supercilii 27) depressor sempti nasi 28) levator anguli oris



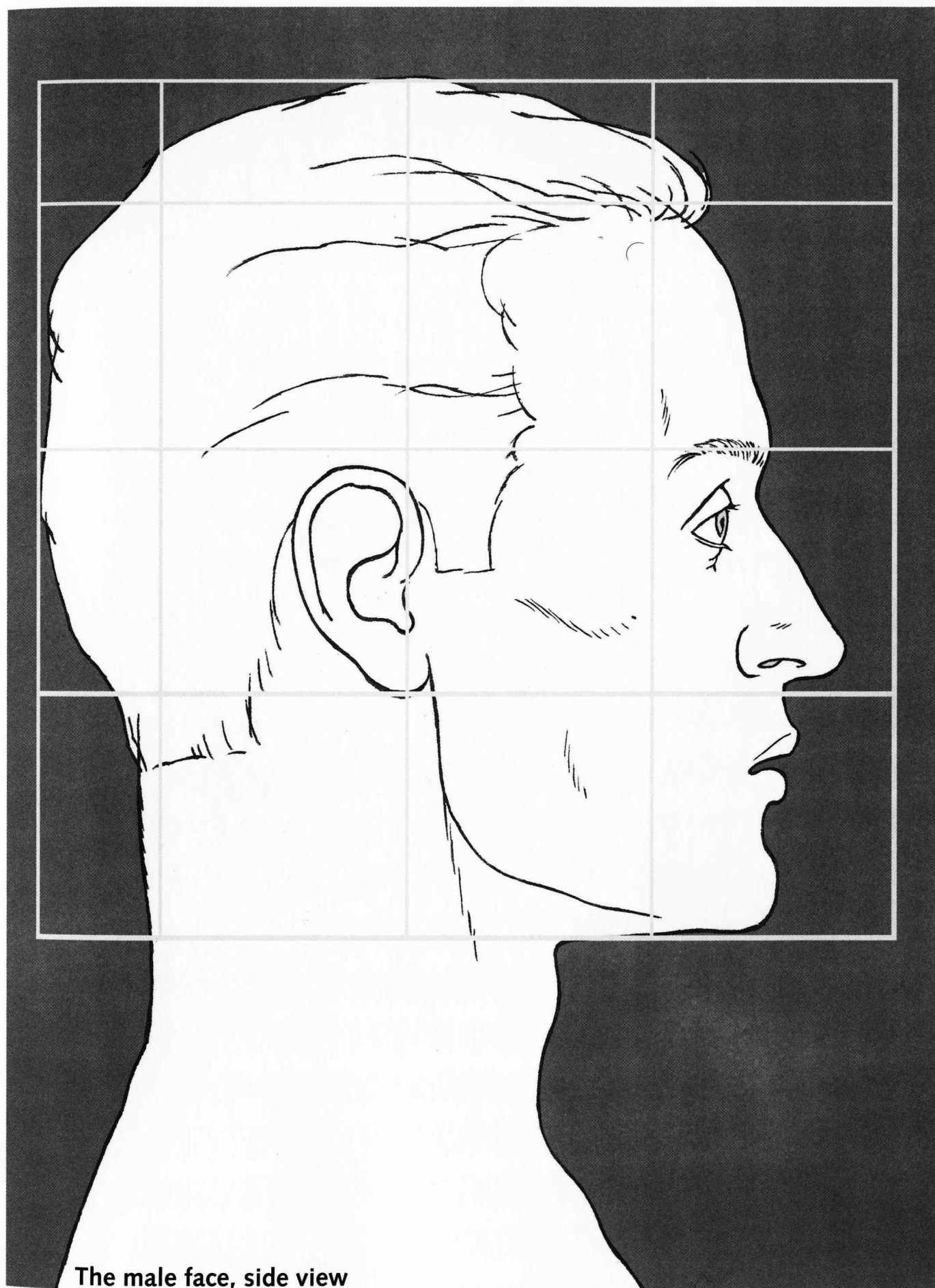
Edvard Munch, sketch for *The Scream*



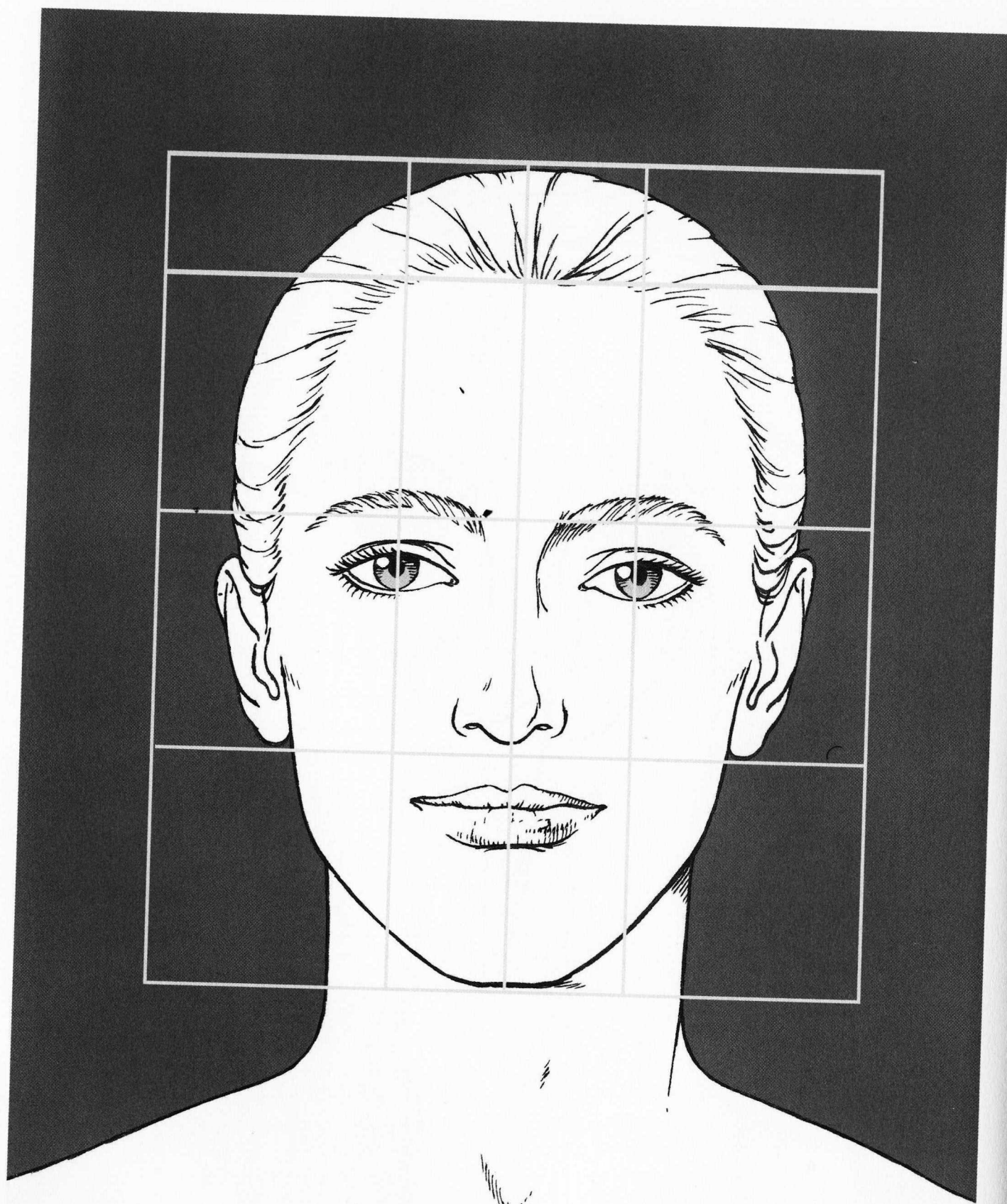
José Guadalupe Posada, Calavera "El Morrongo" (Calavera of the Alley Cat)



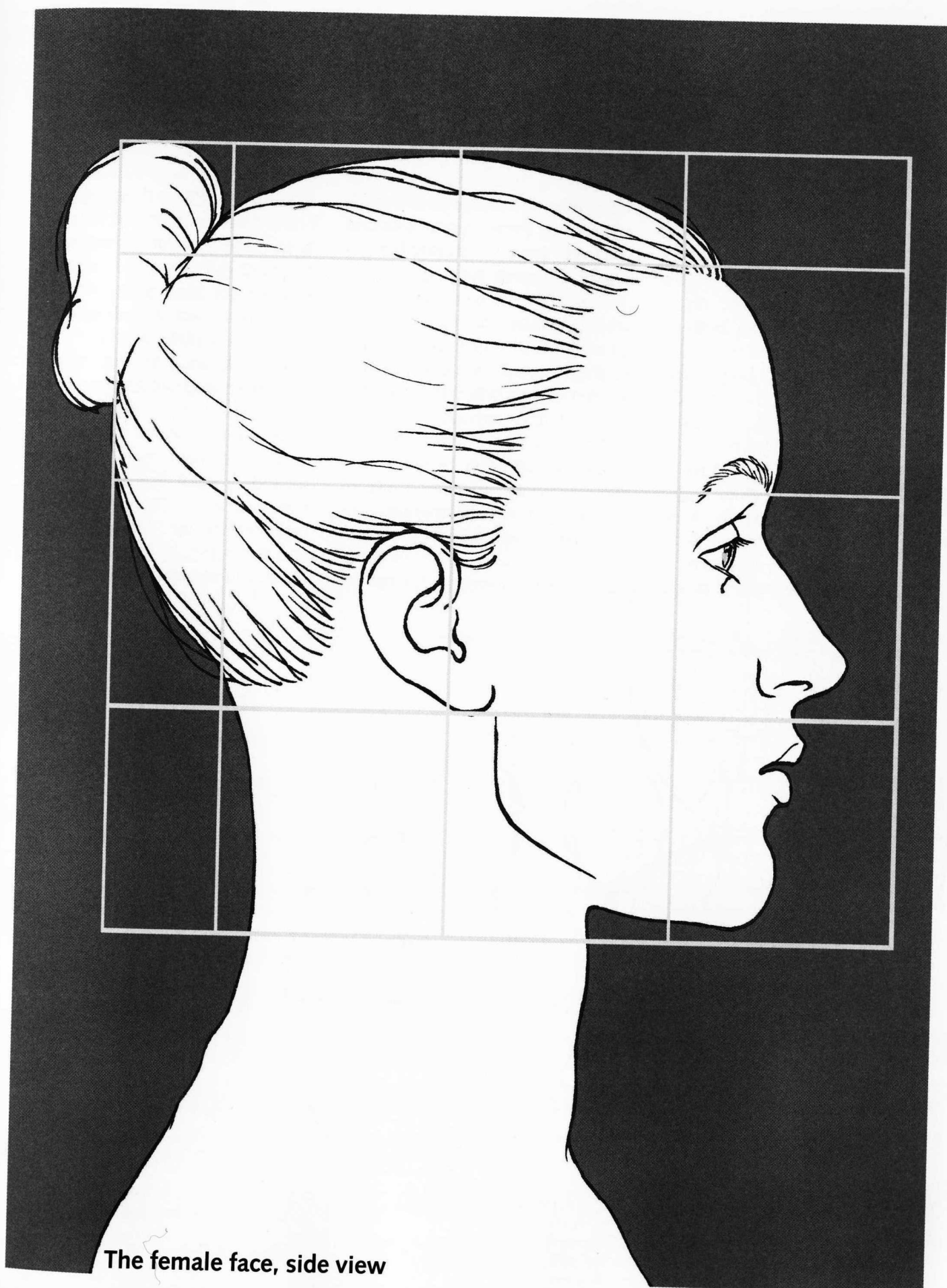
The male face, front view



The male face, side view



The female face, front view



The female face, side view

After having studied and closely observed the expressions represented in works of art by the masters, after having analysed the basics of drawing the body and the proportions of the head, the student can start drawing. Initial simple exercises help the student arrive, through the study of the head, to more complex representations of emotions, feelings, thoughts and attitudes.

The initial phase is preparatory and starts from a study of the details of the face through copying simple structural diagrams.

These outlines also help students commit the main "gestural faces" to memory. Subsequently, these structures can be applied when creating a variety of expressions.

In this book, we wanted to propo-

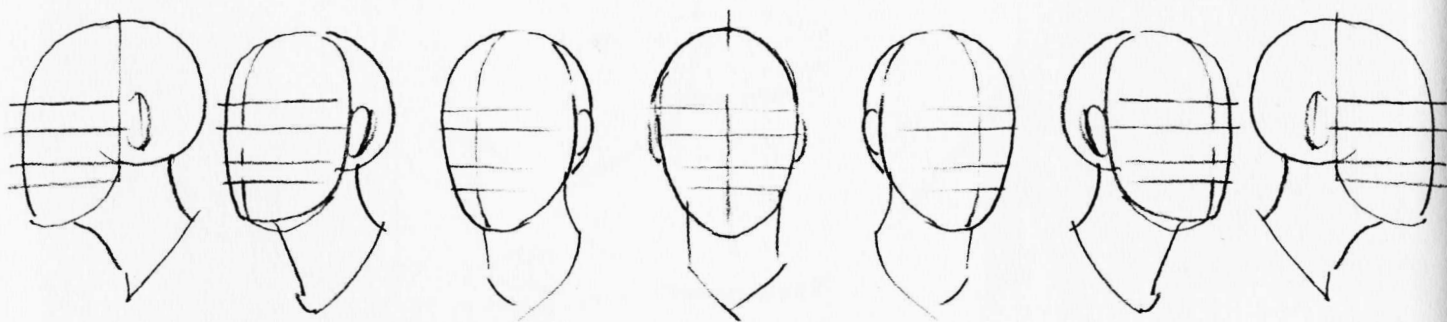
se various types of sketching diagrams, as we are convinced that a good artist must have a few of them in order to deal with diverse subjects.

Of course, the artist will eventually abandon these diagrams to create, with experience over time, a personal graphic language.

The beginner, however, mustn't underestimate the value of this phase, which may seem formal and boring, will prove to be quite useful further down the line. For teachers it is perhaps a bit more difficult to convey that idea, as compared to other technical factors. However, we won't tire of repeating the fundamental concepts of design which, if they're valid for artistic practices in general, are even more so for the re-

presentation of emotions which, along with portraiture, are an artistic and psychological challenge. In summary, it's necessary to:

- define the subject to be studied isolating him/her, framing him/her (be it an expression, a face, a figure, an environment with figures, etc.)
- create the proportions (height/width) or reduce it to simple geometric figures (flat or solid)
- when drawing the figure, proceed from general to specific (in the representation of a face, first trace the oval shape instead of a detail; the main masses precede secondary volumes)
- in chiaroscuro (tonal or graphic) first identify the darker shadows and the points of light, then half-tones and blended shades.



Most art students are convinced that knowing how to draw well means learning how to use graphic techniques and tools. They often think observation is a spontaneous, innate ability – a belief, however, which is incorrect. Visual perception isn't just a physiological factor but also a psychological one. The ability to observe depends on past experiences, from memory to imagination. Those who are good at drawing are those who go beyond sensory

data, beyond mere appearance, and that which s/he observes and portrays is in relation to a mental image which reveals the image's invisible aspects. In short, four factors are required to fully draw properly:

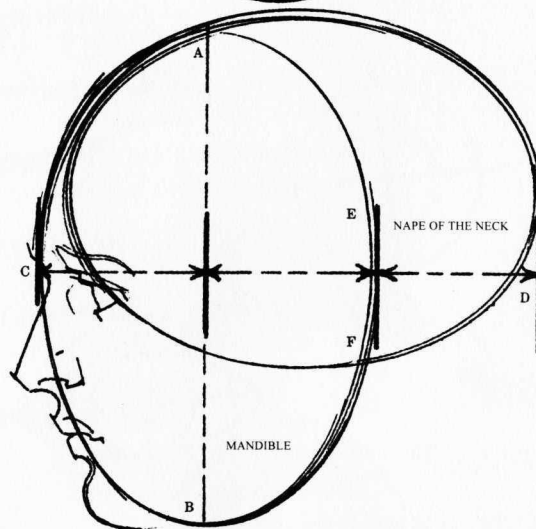
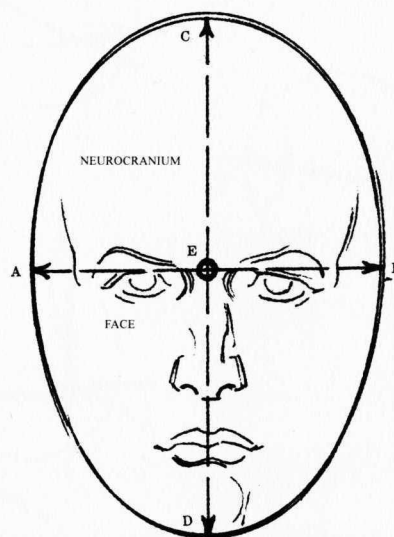
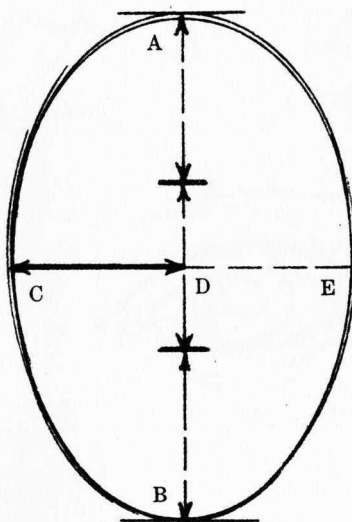
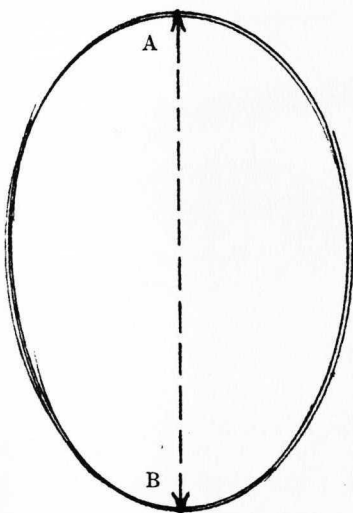
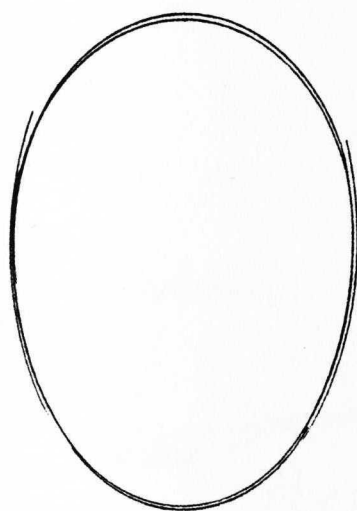
1. technique, 2. knowledge, 3. sensitivity, 4. creativity.

Below we propose a few guided exercises to help with technique.

As for knowledge, in the following chapters we present a grouping of emotions and attitudes, where di-

dactic drawing is always connected to examples by the hands of great masters.

For the third and fourth points, we believe that a book can only inspire the cited qualities. We still recommend drawing from live models, "real" dialogue with who you want to represent, direct observation of works of art and curiosity for internal and external worlds, constant sources of inspiration.



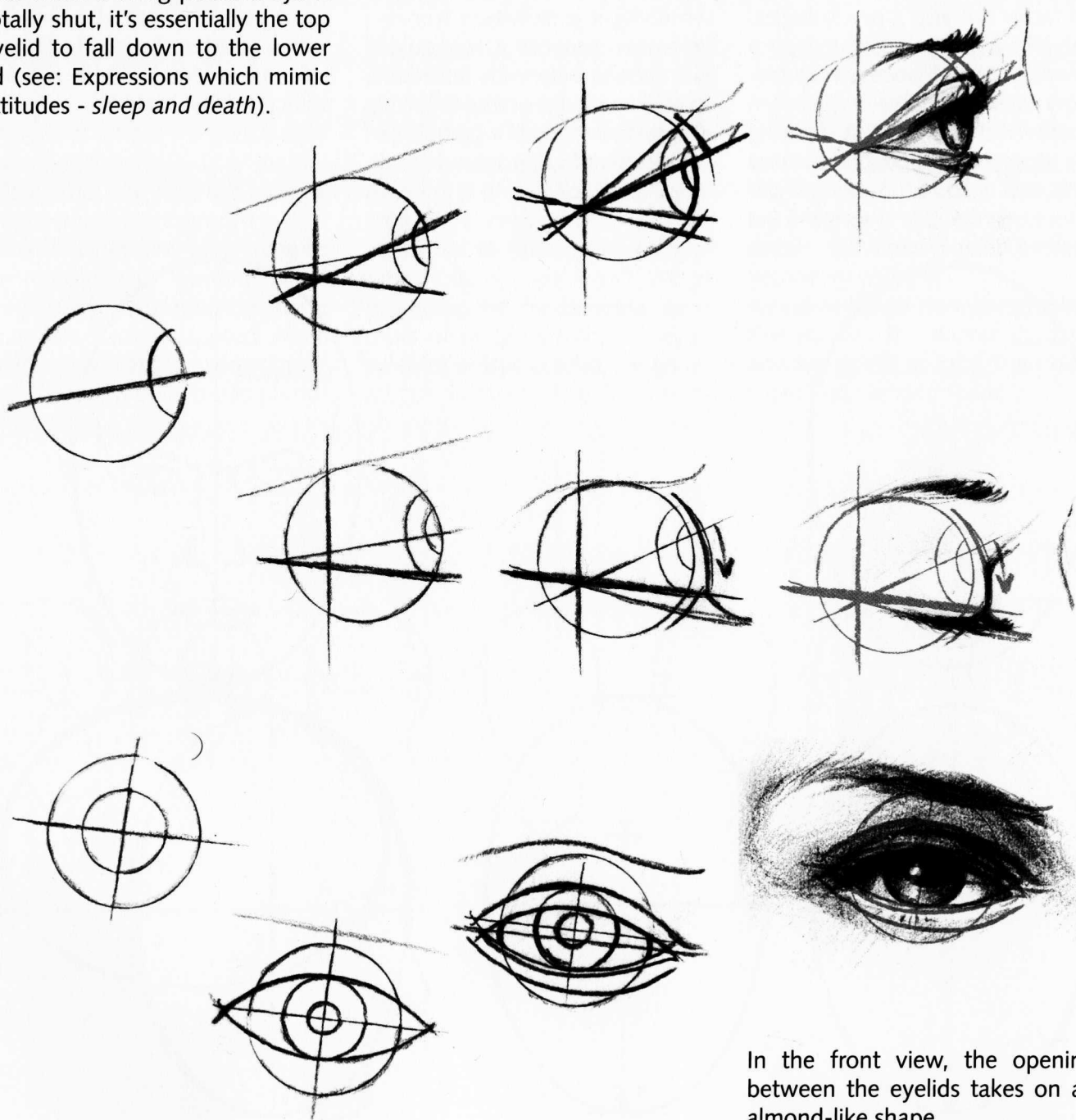
Establishing the proportions of the head, front view (note that the width of the head C-E should be exactly 2/3 of the height A-B)

Establishing the proportions of the head: front and side view (note that the vertical line A-B is equal to the horizontal line C-D in the side view)

Drawing facial details

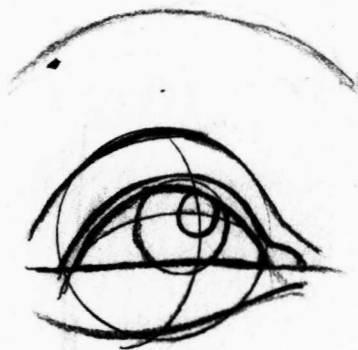
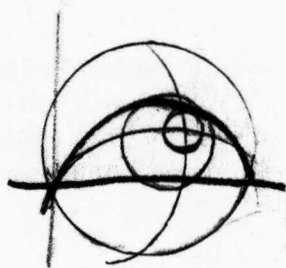
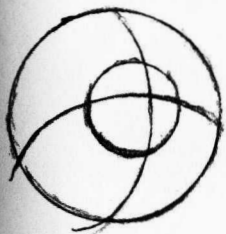
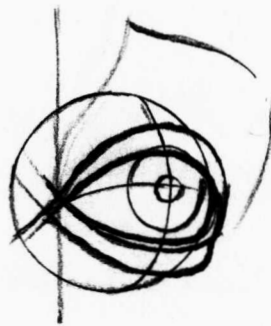
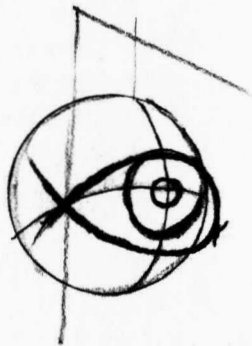
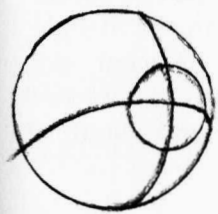
Eyes

In the sketching diagrams, pay close attention to the particular arrangement of the eyelids which, like visors, wrap around the eyeball. You'll note, in particular, that when a living person's eye is totally shut, it's essentially the top eyelid to fall down to the lower lid (see: Expressions which mimic attitudes - *sleep and death*).



In the front view, the opening between the eyelids takes on an almond-like shape.

In general, the iris never appears in full, apart from certain emotions (surprise, fear, etc.), as the upper eyelid covers nearly a third of it.

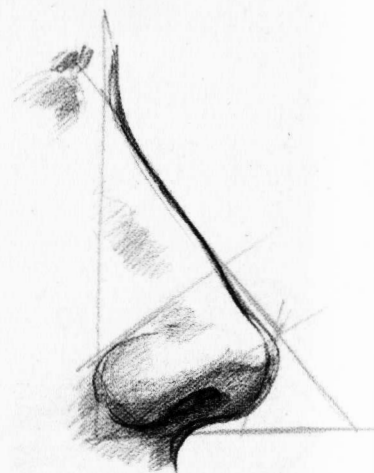
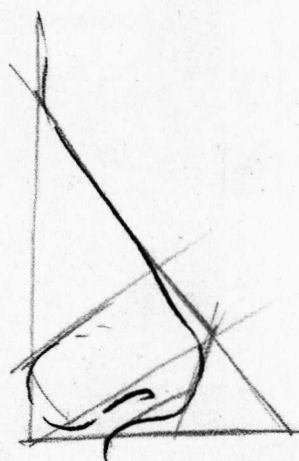
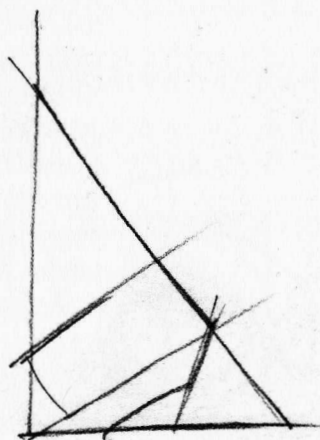
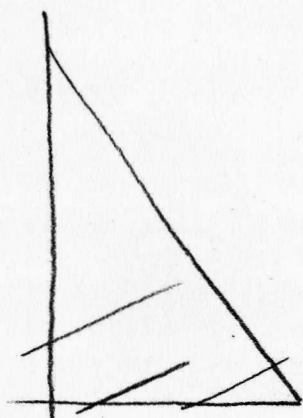


In the $\frac{3}{4}$ view, the eyelid opening forms a teardrop shape: the arches articulated by the rim of the eyelids are accentuated.

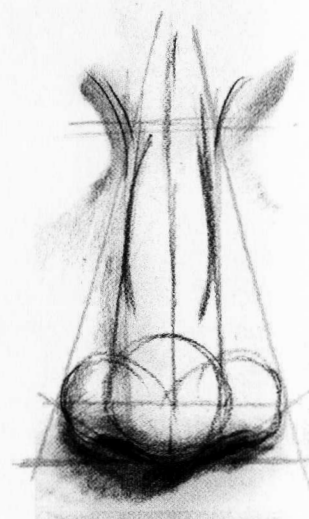
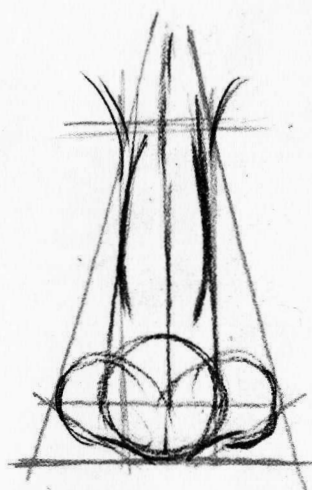
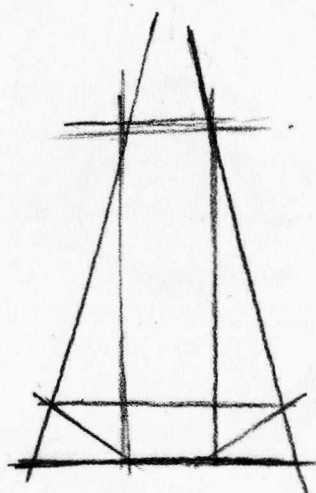
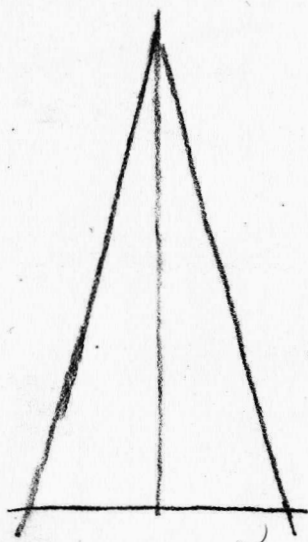
In foreshortened views from below, the lower eyelid rim tends to straighten, while the curvature of the upper eyelid is accentuated.

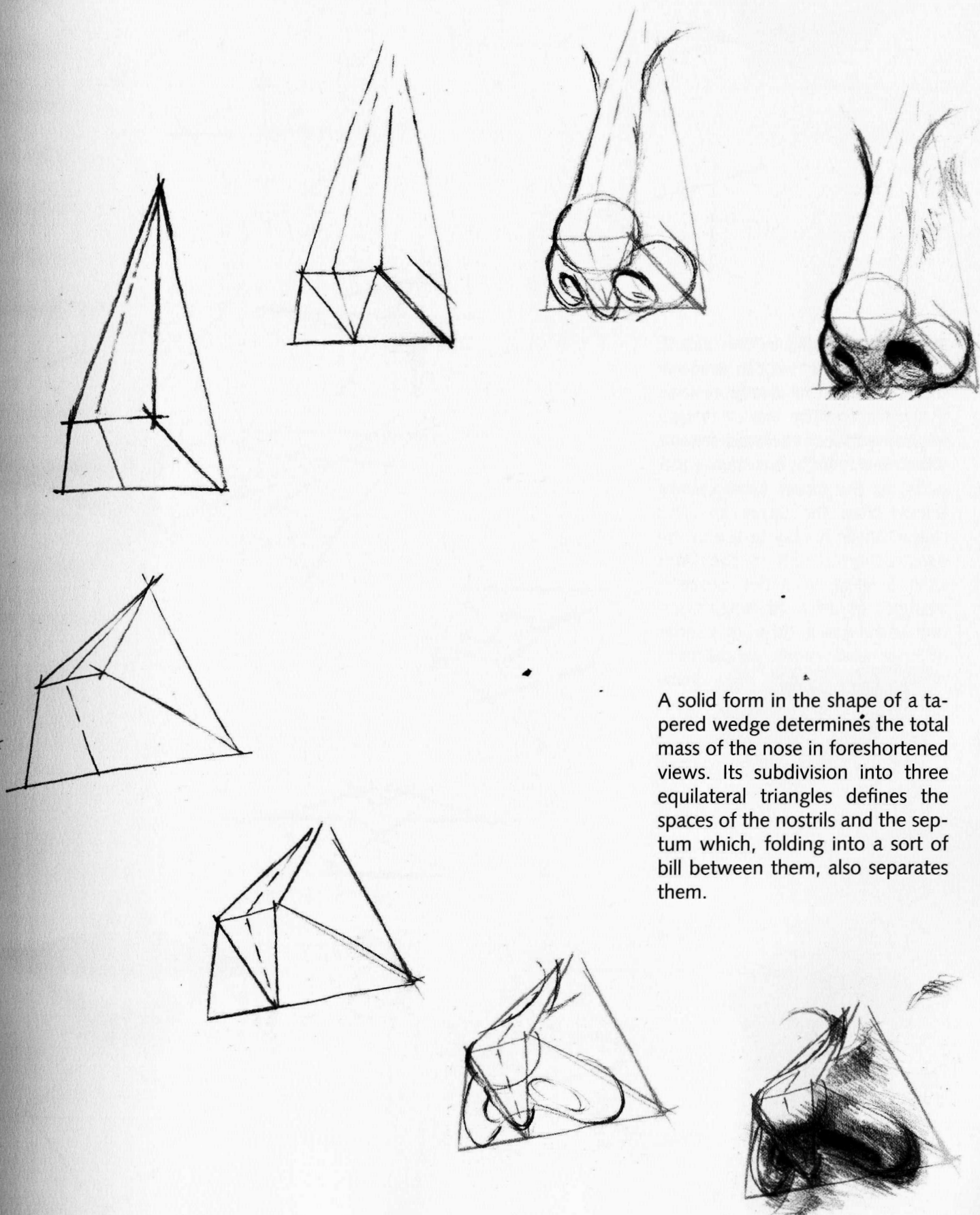
Nose

In profile, the nose can be contained within a right-angled triangle. The hypotenuse, adjacent side and opposite side are determined by the angle, size and length of the nose itself.



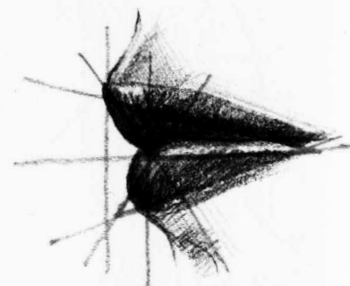
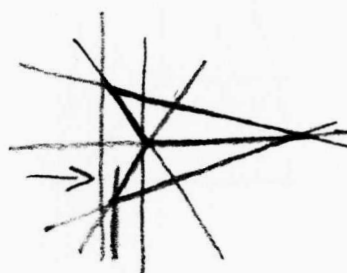
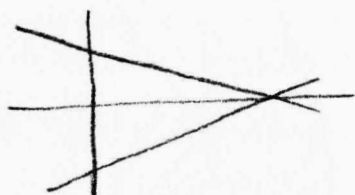
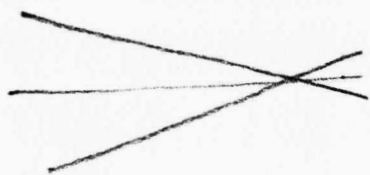
In the front view, we can place the nose in a isosceles triangle with the base corresponding to the width of the nostrils.



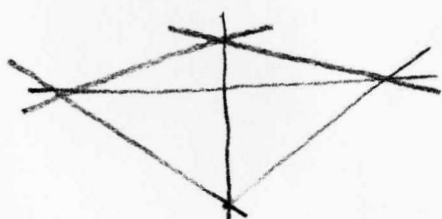
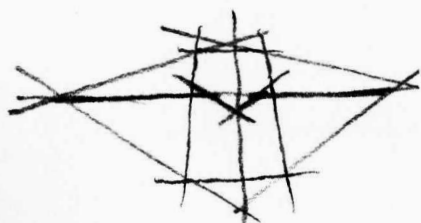
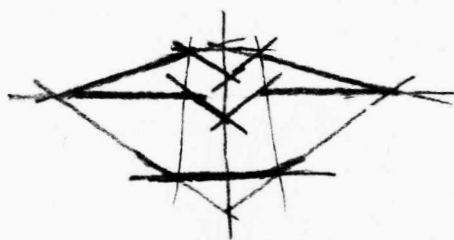


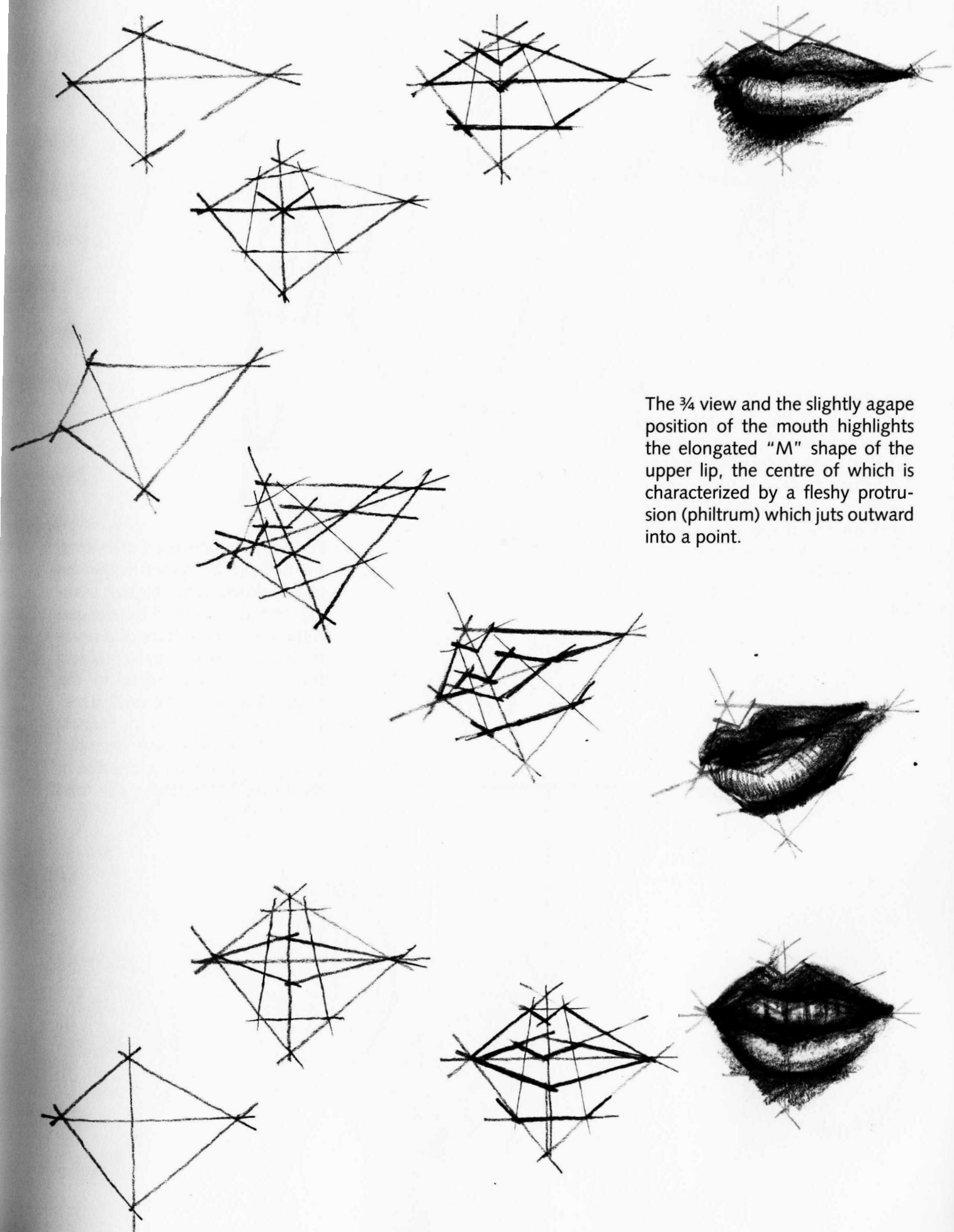
A solid form in the shape of a tapered wedge determines the total mass of the nose in foreshortened views. Its subdivision into three equilateral triangles defines the spaces of the nostrils and the septum which, folding into a sort of bill between them, also separates them.

Mouth



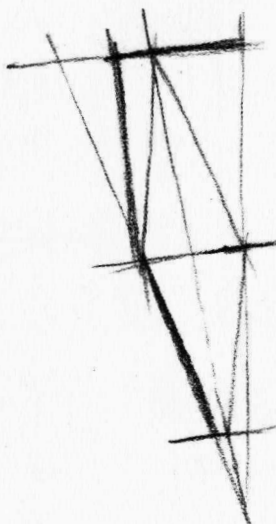
Placing the profile of the mouth within a triangle, we can see how the upper lip protrudes more than the lower lip. The line of closure when the mouth is closed doesn't divide the triangle into two equal parts, as the lower lip is usually thicker than the upper lip. This characteristic is easy to see in the construction sketch in the front view. Starting from two isosceles triangles of different heights joined at the bases, through a series of inner subdivisions, we can define the main form and mass of the mouth.





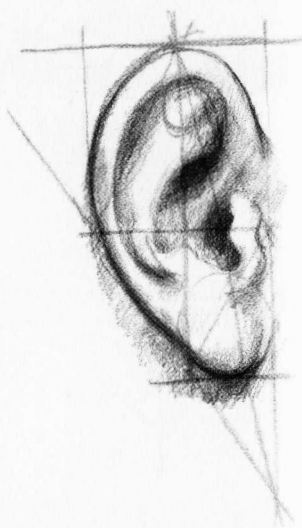
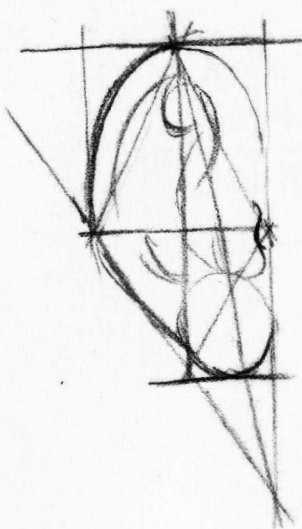
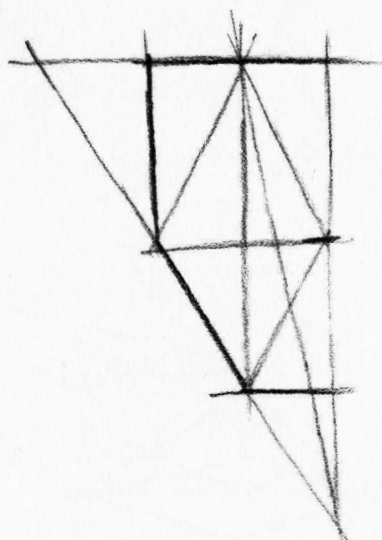
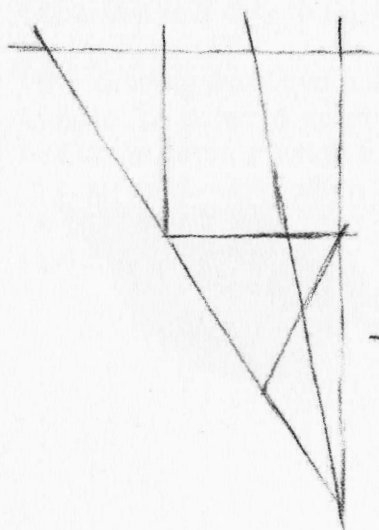
The $\frac{3}{4}$ view and the slightly agape position of the mouth highlights the elongated "M" shape of the upper lip, the centre of which is characterized by a fleshy protrusion (philtrum) which juts outward into a point.

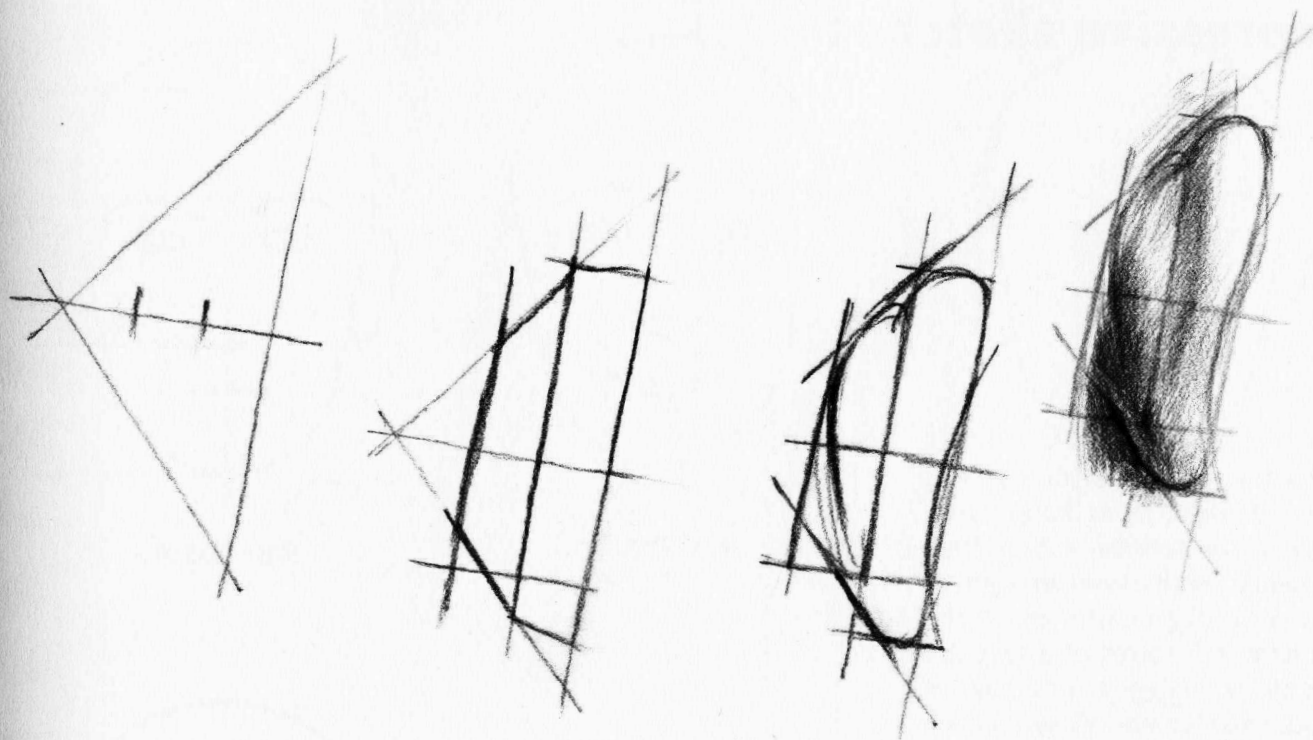
Ears



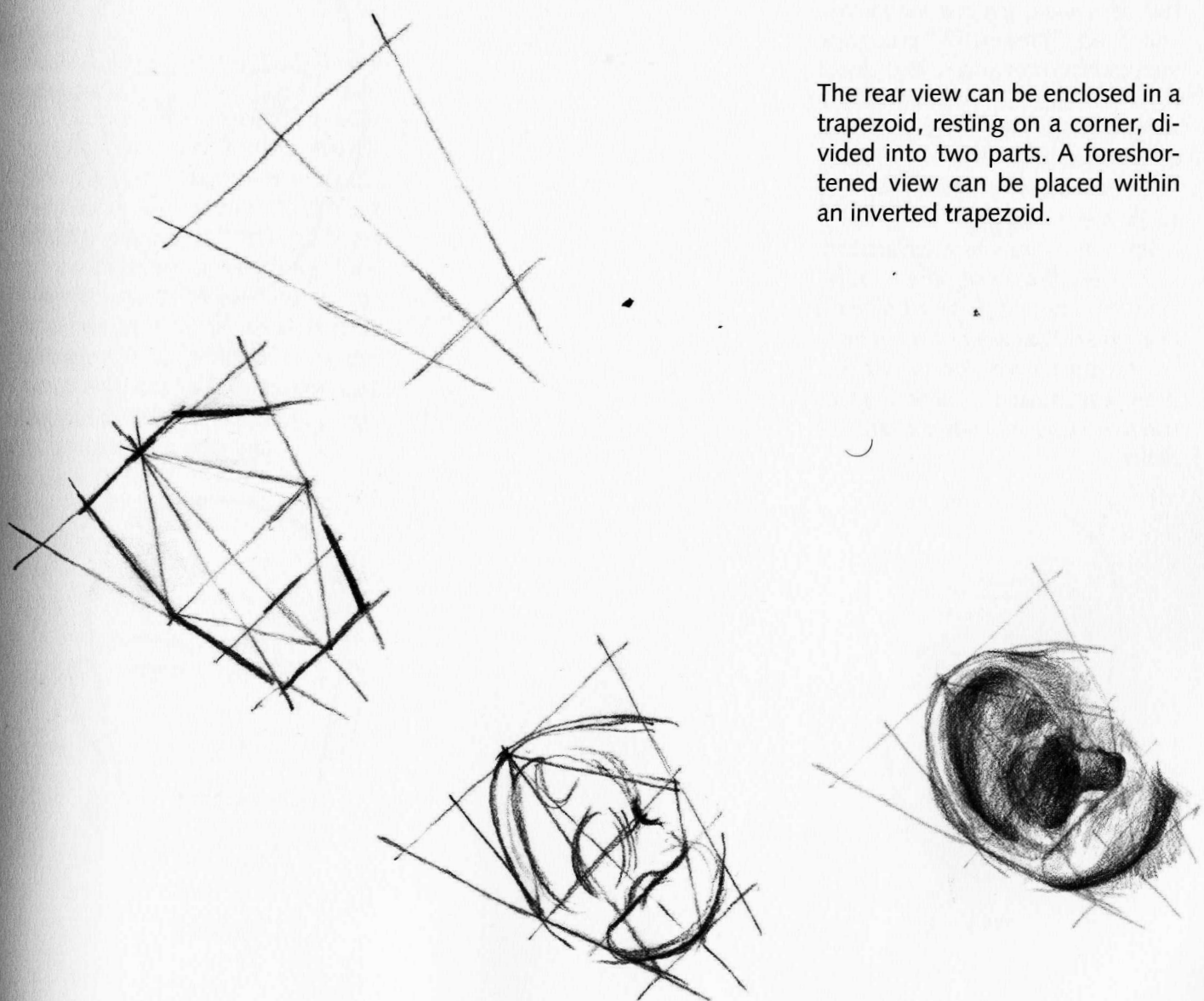
The shape of the ear is similar to that of a shell. It's made up of an auricle or pinna (the helix and anti-helix), an auricular opening protected by a protrusion (the tragus) and a lobe. Forked, the anti-helix takes on the shape of a curved "Y".

For both the side and front views, the ear can be placed within an upside-down right-angled triangle. The upper part of the ear corresponds to the surface of a square, which is created by identifying the base, corresponding to the tragus. Then draw the vertical median, originating from the highest point of the helix, and extend it until you reach the hypotenuse of the triangle to establish the total length of the ear.



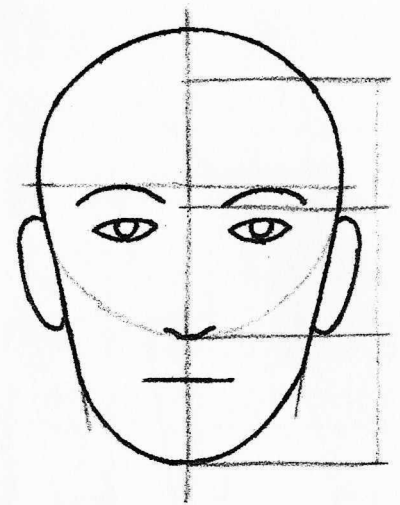


The rear view can be enclosed in a trapezoid, resting on a corner, divided into two parts. A foreshortened view can be placed within an inverted trapezoid.

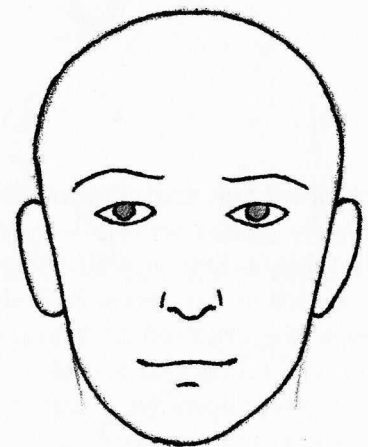


Expressive sketches

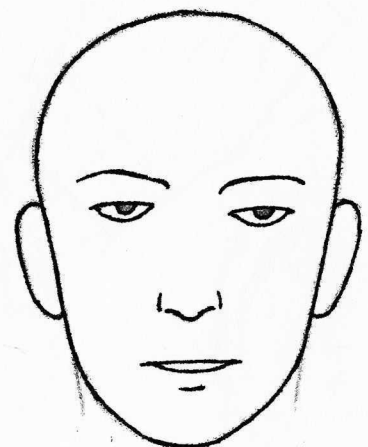
We know that a person's face is often thought of as happy, melancholy or serious, rather than triangular, with close-set eyes, a long nose, big mouth, etc. If the permanent features of a face are essentially limited, the number of expressive combinations which can occur are therefore also limited. However, even a very small child can immediately recognise various countenances and most common expressions. The reason why is simple: we perceive a face as a single unit. When observing someone as s/he smiles, we actually see a "happy" face, not a collection of muscle contractions. The eyes, the nose, the mouth, even the colouring, pupil dilation and other signs are not recognisable on their own. Rather we see their organization, which gives rise to unique, individual characteristics.



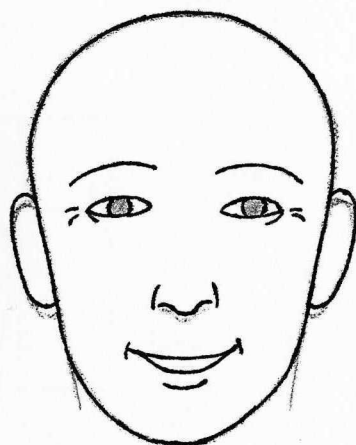
Base sketch



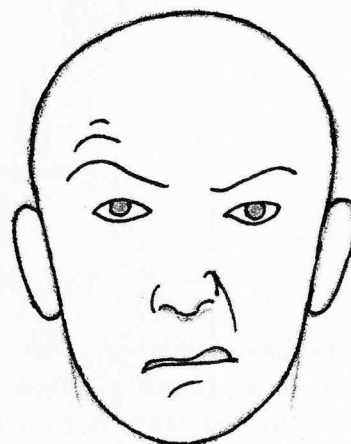
Relaxed



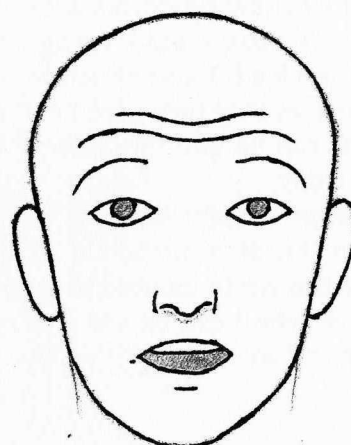
Boredom



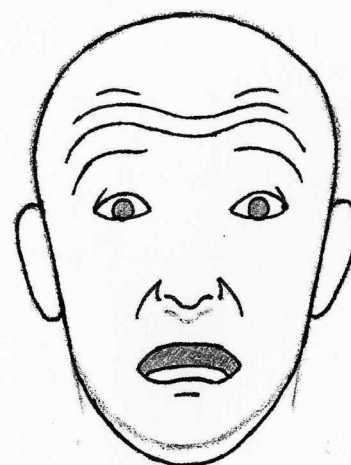
Happiness



Contempt



Surprise



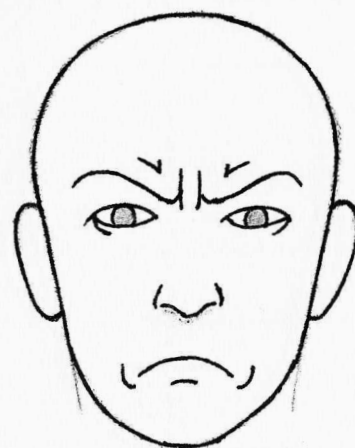
Fear

Thus it isn't surprising that the rendering of facial expressions in art is a complex problem. In *On Painting* by Leon Battista Alberti (the oldest treatise on the subject), the author writes that it's difficult for the painter to distinguish (in representation) a laughing face from a crying one. Even today, students at fine art schools face notable difficulty in rendering the exact nuances of expression, just like the difficulty in creating precise features in a portrait.

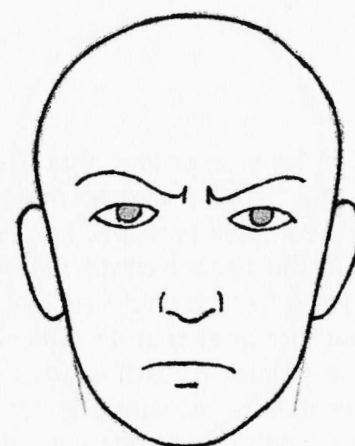
Before being able to create likeness in a portrait, we have to know how to draw a plausible head and face. The same is true for expressions as well: before attempting more minute differences, we should master fundamental emotions.

If for all real-life drawing it may be useful to have proportional canons (see "Anatomy and Physiognomy of the Head") and structure-diagrams, as they help save time, the same can be said for drawing expressions.

Here we present sketches for the main facial expressions. These sketches are to be used as generic bases, which can be varied according the artist's specific needs.



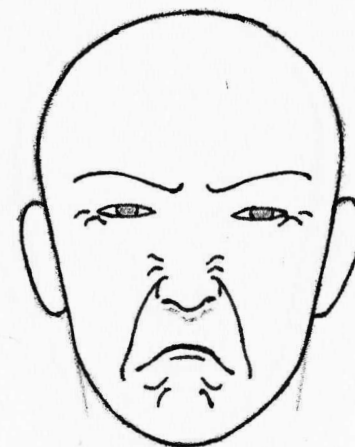
Anger



Wrath

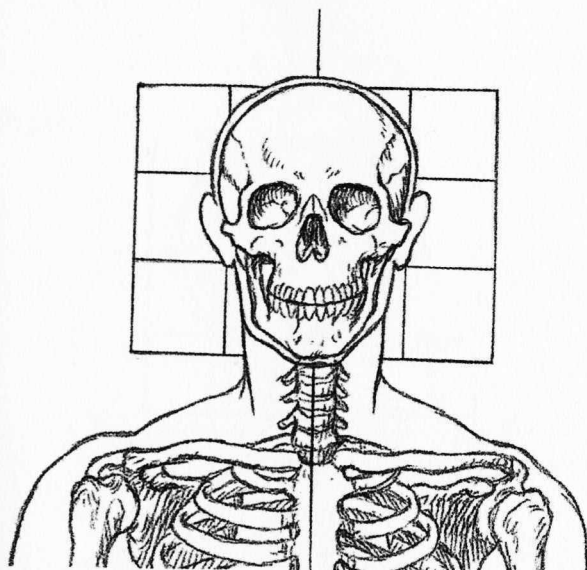


Sadness

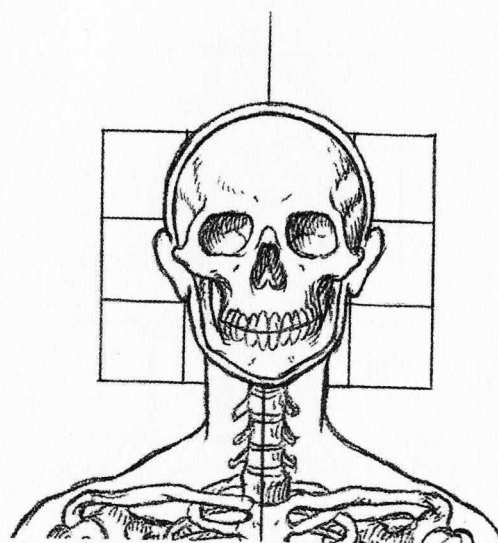


Disgust

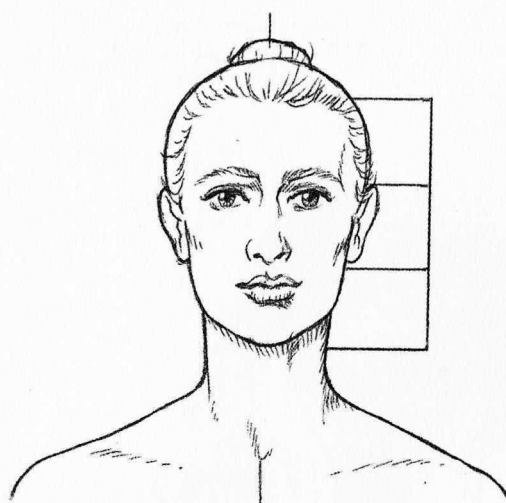
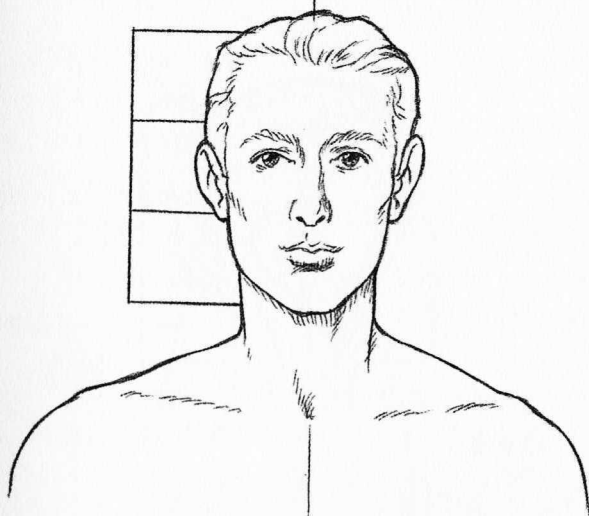
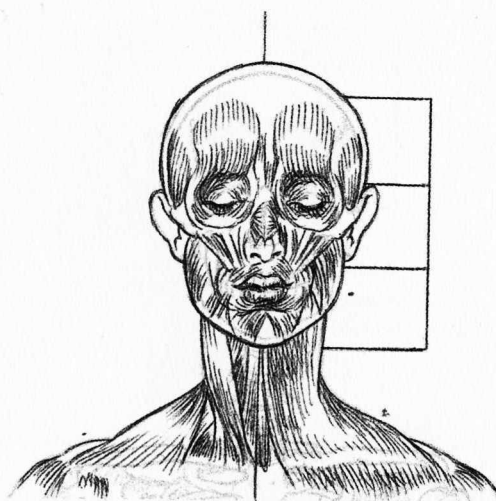
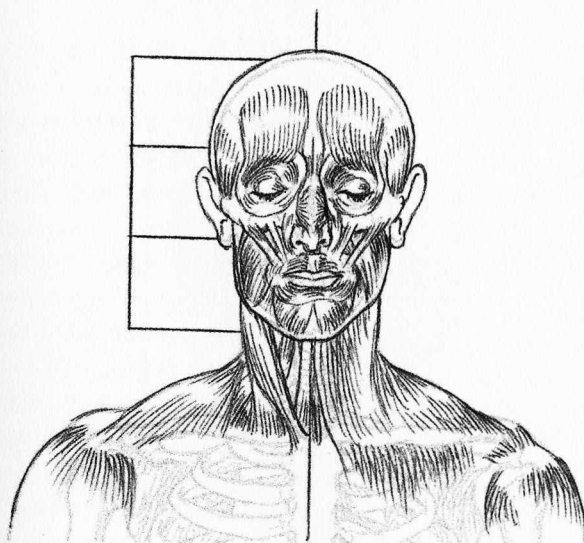
Drawing the head



Male head, front view

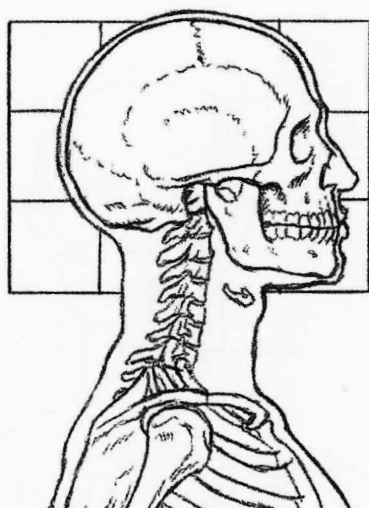


Female head, front view

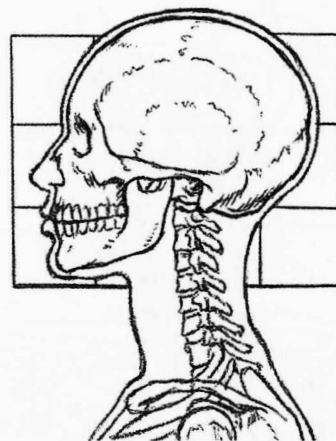


To learn how to draw from memory, it's helpful to first practice with a copy, then repeating the exercise on your own with a certain amount of freedom. Draw the

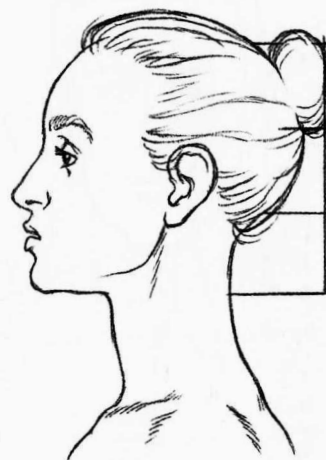
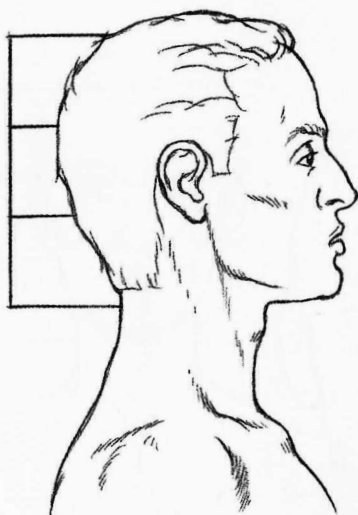
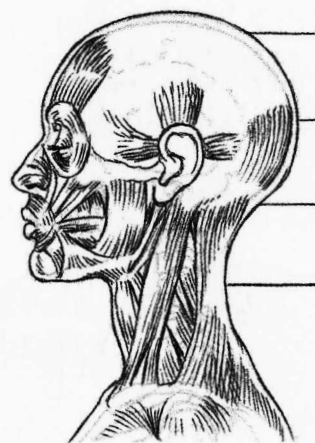
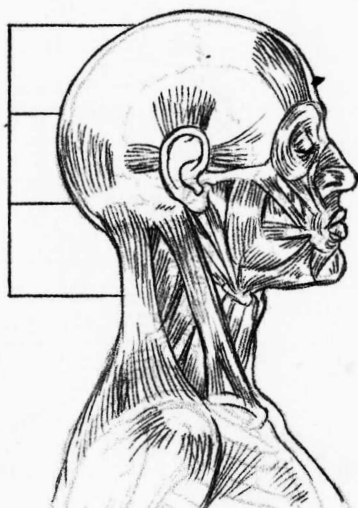
skull on top of a proportional grid. Add the face's expressive muscles, then re-draw (or trace) it, completing the physiognomy, adding the hair and other details.



Male head, side view



Female head, side view

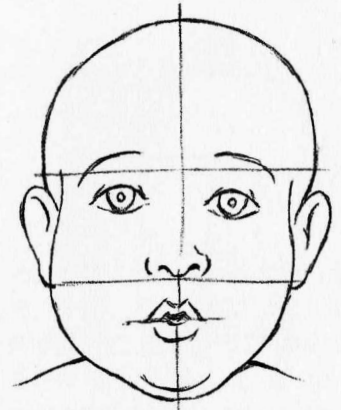
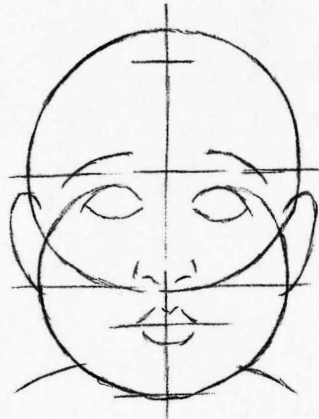
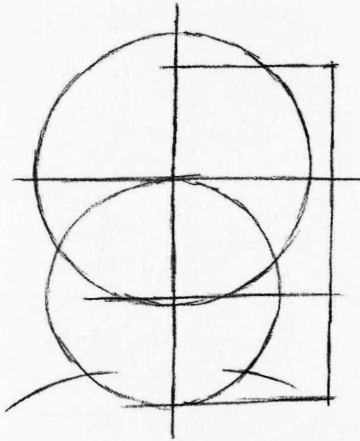


With repetition and practice, the proportional grids, the skull, the muscles and the physiognomy will become expertise, kept in the brain

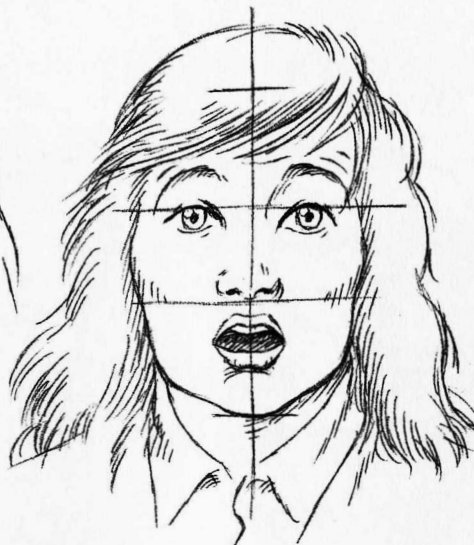
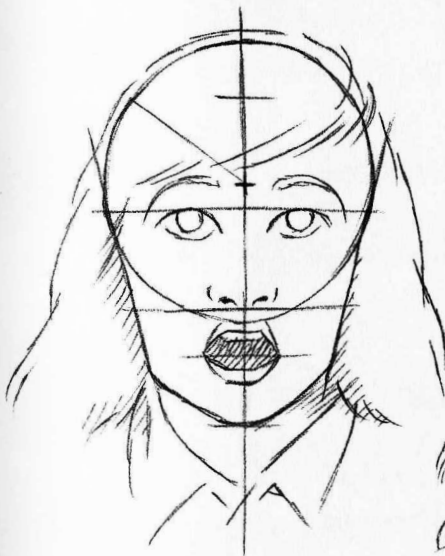
of the artist. At this point, you can draw faces and heads from memory, in different positions and with a wide variety of expressions.

Drawing expressions

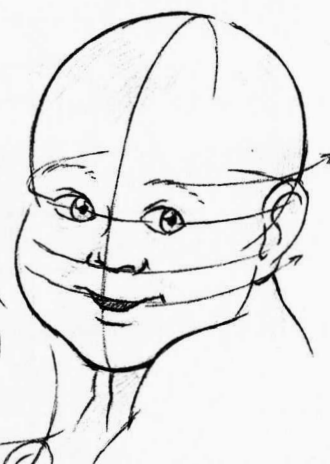
Surprise



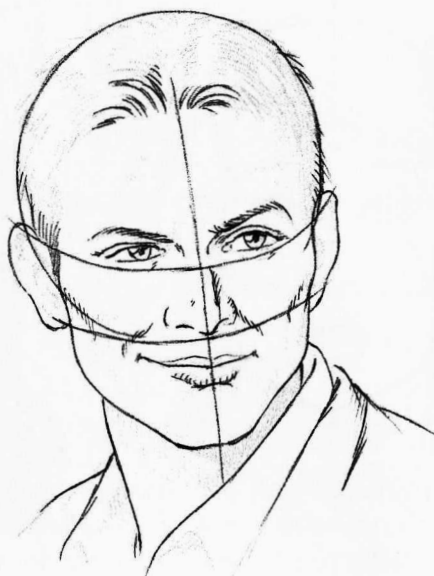
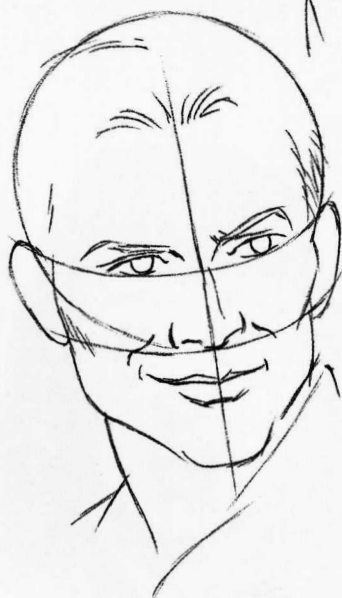
After having drawn the sketches for the main facial expressions and after having mastered the proportions and human anatomy, the student can move on to studying simple expressions, such as astonishment and surprise. Draw a circle where the perpendicular lines meet. Extend the vertical line and divide it into three modules, draw another circle and you now have the framework for the head. Add the eyes, nose and mouth on their respective axes. Continue on to add details and shading.



Smiling



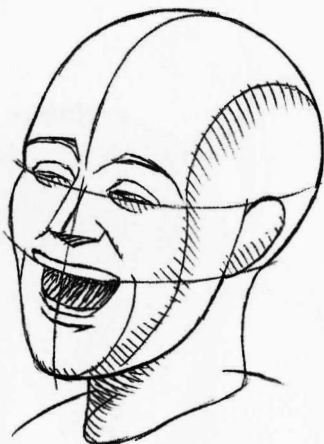
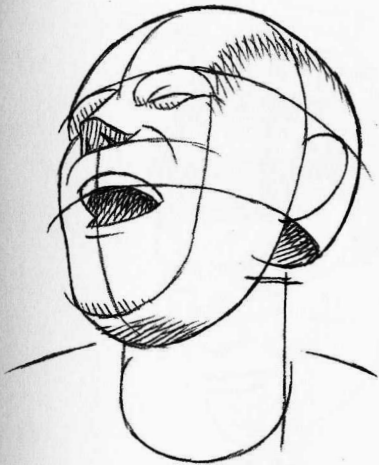
The drawings show the construction of the head, from the framework/structure to the expression. Note how each vertical axis defines the angle of the face. Here we've illustrated: the curious smile of a child, the full smile of an adolescent and the ironic smile of an adult.



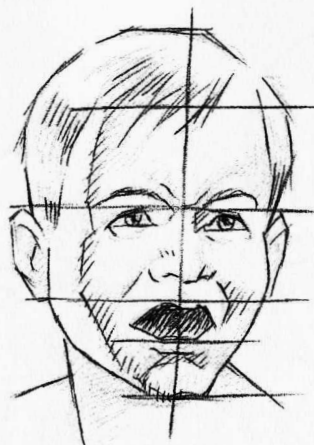
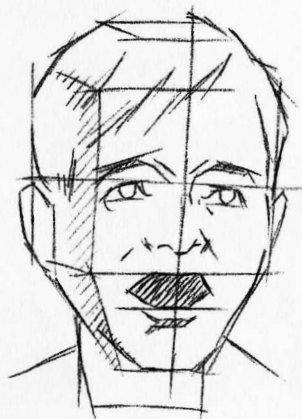
Laughing



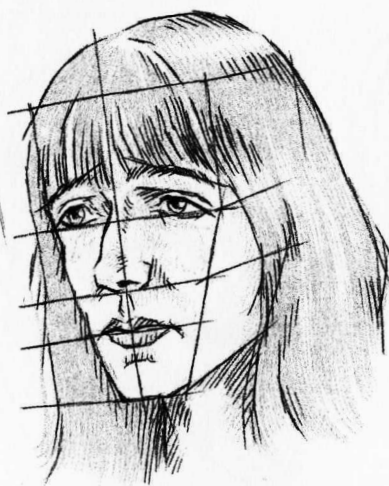
The illustrations show (from left to right) the schematic volume of the head, the axes used to construct the face and the final expression with shading. From top to bottom: laughter with an open mouth, laughter with the head tilted backwards and very intense laughter (the sort which also includes crying).



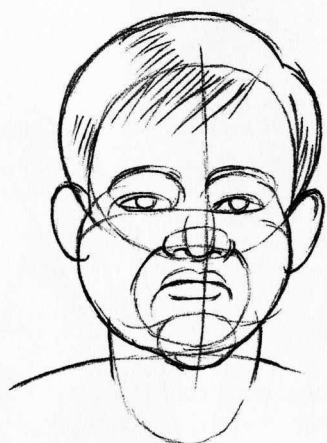
Sadness



The construction of the head and the facial expression can be done through the composition of a framework made of geometric, block-like forms. From top to bottom: the angry crying of a child, painful sadness - a lump in the throat - of the young man, the inconsolable young woman.



Disgust



The illustrations show curvilinear compositional outlines, a rather quick method to create the shape of the face and the subsequent expression. From top to bottom: the aversion of a child, the repulsion of a woman, the disdain of an adult.



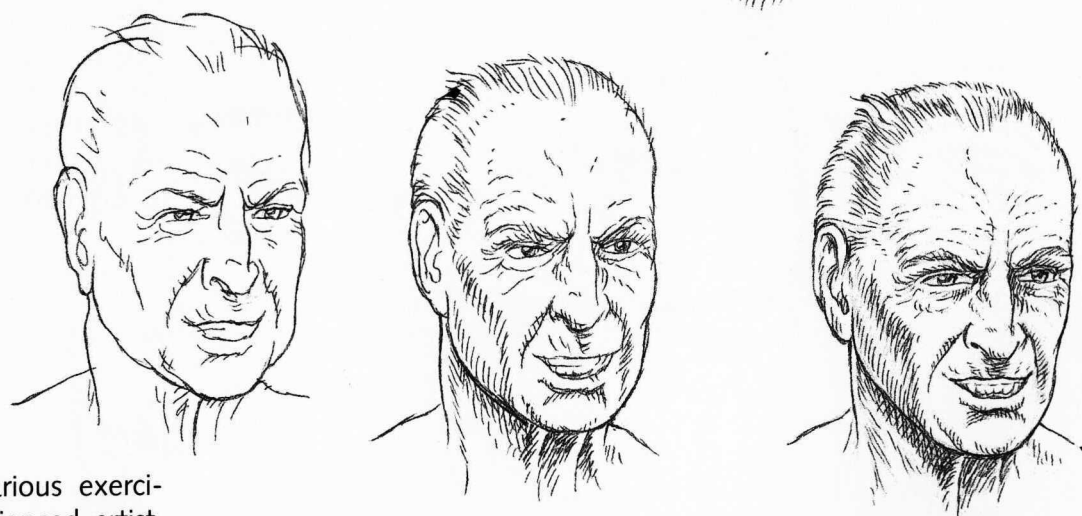
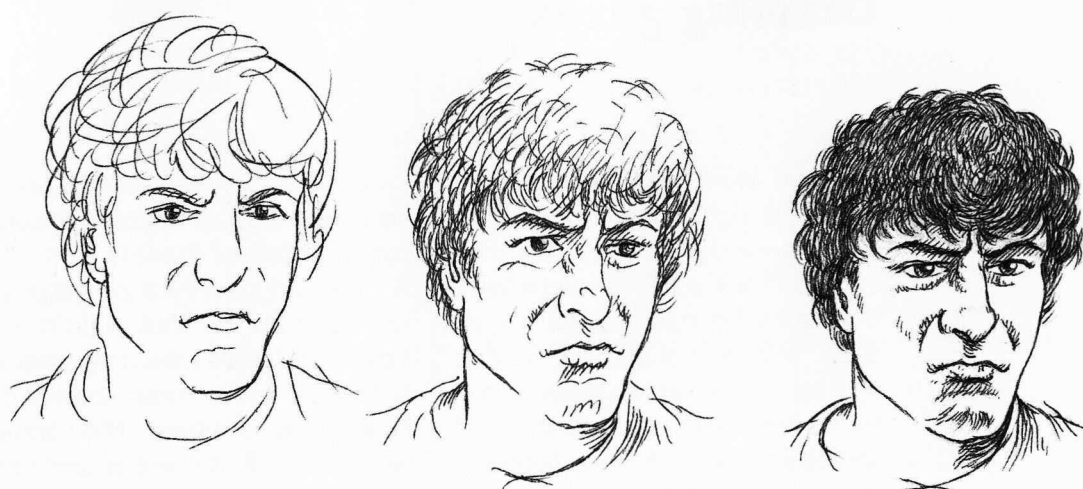
Fear



We can now draw an expression starting directly from the face (see: Drawing expressions) to arrive at the complete physiognomy. From top to bottom: the dismay of a little girl, the terrified scream of a young man, the fright of an old man.



Anger



After completing various exercises, or for an experienced artist, it's possible to go directly to drawing the expression without the help of compositional outlines. The illustrations here show (from left to right): draft, the sketch and the completed drawing with hatching. The first two phases, though more generic, may be more effective. From top to bottom: the repressed anger of an adolescent, the wrath of a woman and the ire of an old man.

Drawing gazes

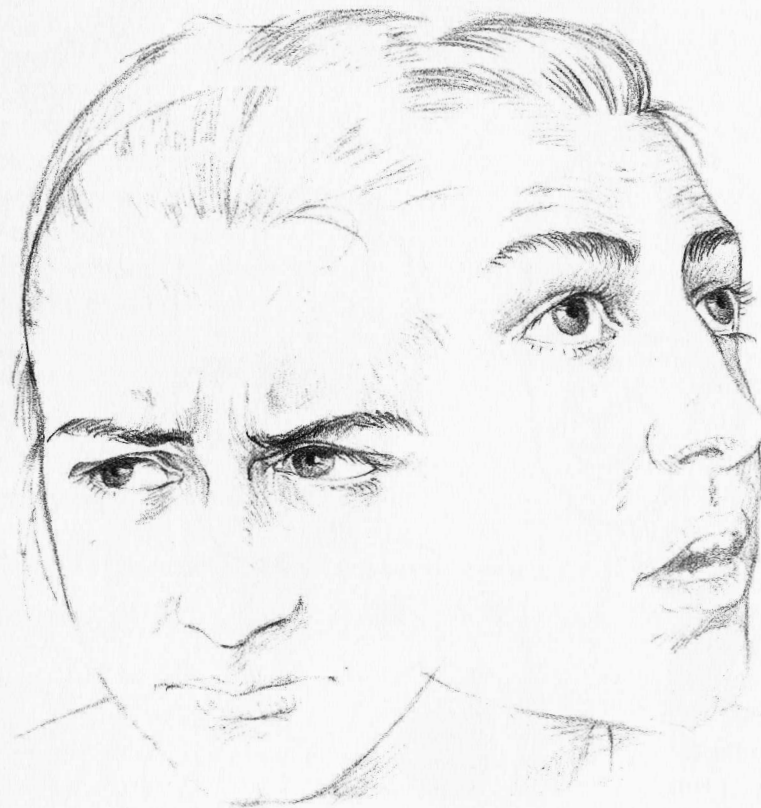
Eyes are more than just a simple organ for sight. Often called mirrors and windows to the soul, they always "look out" for something that goes beyond the purely visual. "We do not see the human eye as a receiver, it appears not to let anything in, but to send something out. The ear receives; the eye looks. (It casts glances, it flashes, radiates, gleams.) One can terrify with one's eyes, not with one's ear or nose. When you see the eye you see something going out from it. You see the look in the eye." (L. Wittgenstein, *Zettel*, 222).

The act of looking often expresses

a state of mind or an attitude, at times more eloquent than a gestural configuration of the face.

A look can convey a message of love or hate "If looks could kill, how many dead men there would be! And if looks could fecundate, how many children! The streets would be full of corpses and pregnant woman!", in the words of Paul Valéry.

This is mainly due to the dilation or contraction of the pupil, followed by the movements of the eye and eye socket muscles. They also has the ability to communicate and violate, by its presence, the privacy of others.

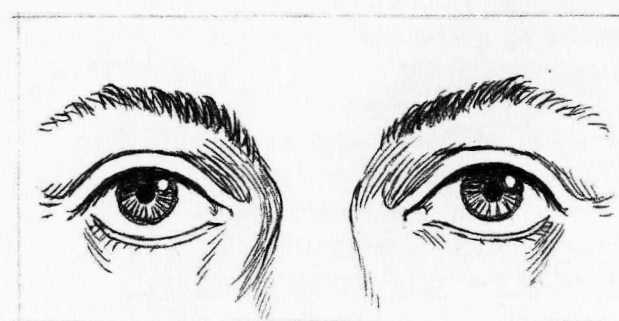
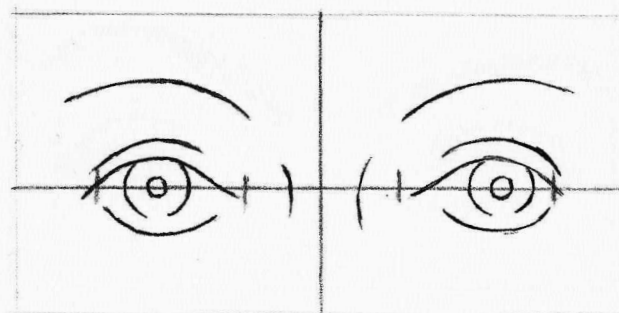
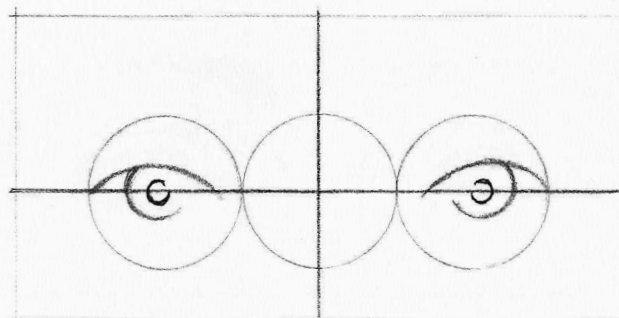


There are essentially two types of gazes: instinctive/unintentional or cultural/intentional. The former category includes gazes which express emotions, while the latter includes those which express feelings, interpersonal attitudes, and perceptions. Emotions come to us externally and we can, at most, try to hide them, always with a good amount of difficulty. They're temporary; we know that one can go from sadness to euphoria in just a few seconds. Attitudes, perceptions and feelings are, on the other hand, more deeply rooted and last longer. Put simply, we can say that they exist when emotions and moods result in ideas.

In short, the first type of gaze is a reaction to external stimulation, while the second is a product of our thoughts.

For an artist, concentrating on the face is crucial to capturing even the smallest expressive nuances.

Beginners should start by creating the eyes (eyelids, irises, pupils, bridge of the nose and eyebrows), paying close attention to the proportions and the direction of the gaze (see the illustrations at right).





Direct/resolute gaze



Languid gaze



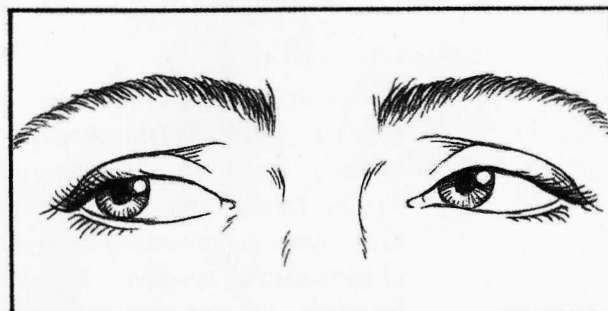
Hard/cold gaze



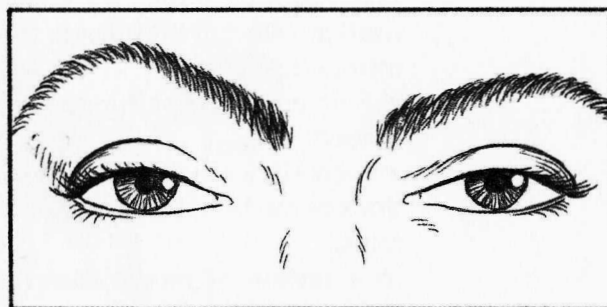
Naive/dreaming gaze

The first phase will consist of reproducing the various types of emotional gazes: sad, joyful, surprised, fearful, etc.

The second will require the construction of the various expressions of perceptions or feelings; starting from the easiest ones (concentration, contempt) to come to the more complex ones



Concealing gaze



Ironic/scornful gaze



Depressed/introverted gaze



Elusive/inhibited gaze

(embarrassment, adoration). Representing feelings such as love, for example, is already quite difficult when drawing the entire face, much more so when we are depicting just the gaze.

So, here we've represented looks which are meaningful for an artist who depicts a number of typical feelings and attitudes.

5 CLASSIFYING EMOTIONS

There have been multiple attempts throughout history to classify emotions. However, so far we haven't been able to decide upon a universally-accepted classification system. The differences are due not just to the intrinsic subjectivity of the operation, but also to the notable number of parameters which can be taken as a base for their categorisation. We can thus divide them into two groups:

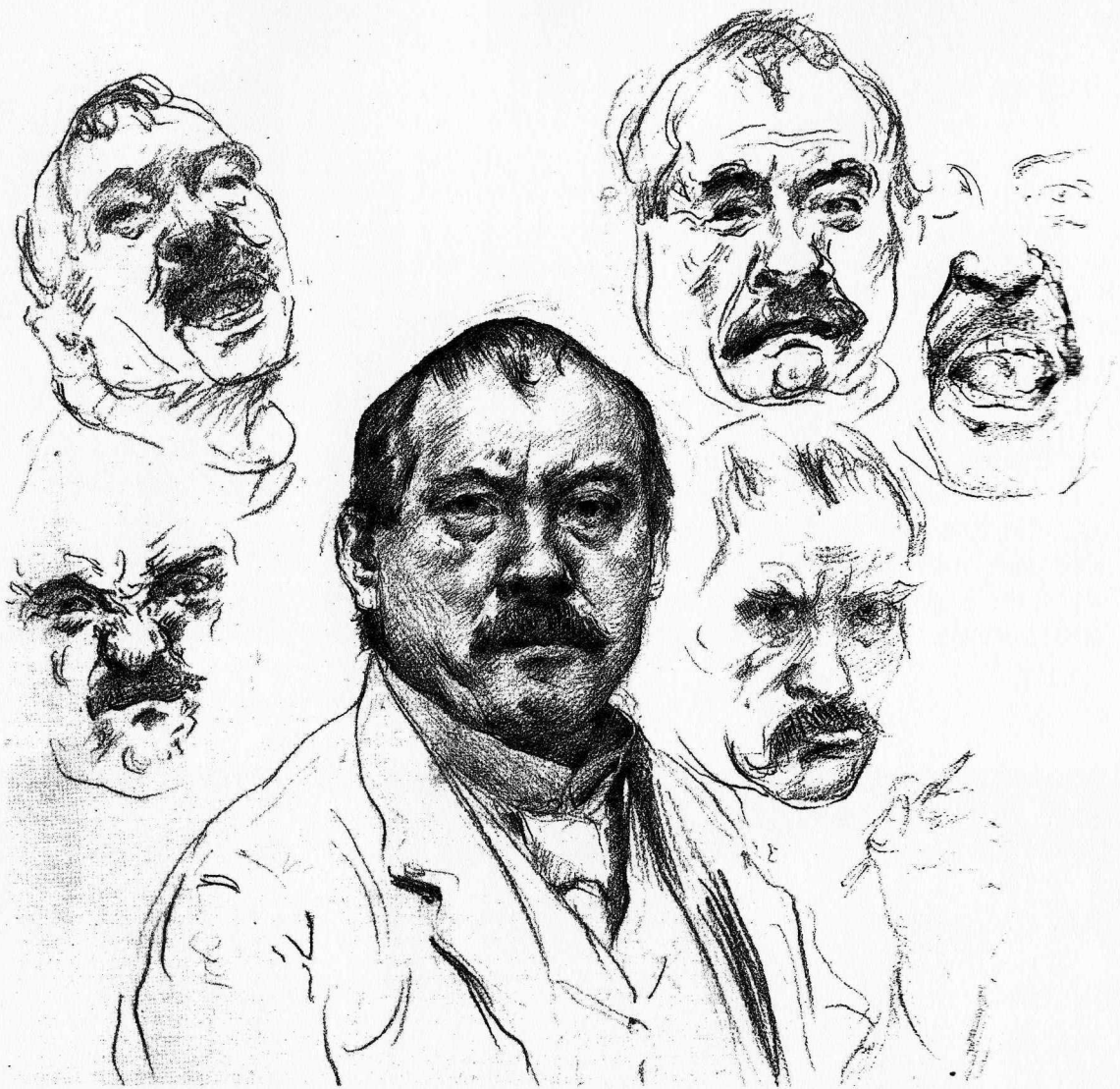
- Primary, basic or fundamental emotions.
- Secondary emotions: combinations or mixtures of primary emotions.

In a review of recent literature, Kemper (1987) lists the primary

emotions as they've been proposed. For Kemper, there are at least four primary emotions with a physiological base: fear, anger, sadness and satisfaction. According to Kemper, secondary emotions derive from the primary emotions, as does social interaction. Thus, primary emotions are independent of culture; they're innate and old enough to have been handed down from our common ancestors. There's no doubt that facial expressions are an evident indicator of the emotions felt by an individual. Considering other bodily signals as well, Robert Plutchik identified eight fundamental emotions.



Harry Clarke, a 1922 illustration from The Fairy Tales of Perrault, Harrap Ltd, London



Feature details by Lovis Corinth, Self-Portraits, 1910

The 8 basic emotions are:

- Joy
- Agreement/Acceptance/Approval
- Anger/Ire
- Expectation/Anticipation/Waiting
- Disgust
- Sadness/Grief
- Fear
- Surprise

A few emotions with psychosocial origins are:

Primary dyads

(a mixture of similar emotions)

- joy + acceptance = friendship
- fear + surprise = alarm

Secondary dyads

(a mix of emotions separated by one degree)

- joy + fear = sense of guilt
- sadness + fear = resentment

Tertiary dyads

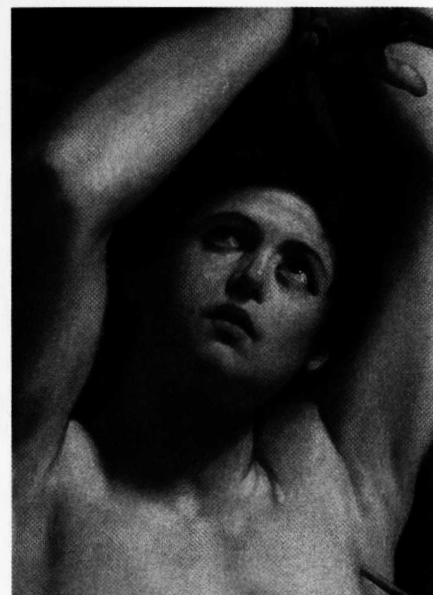
(a mix of emotions separated by two degrees)

- joy + surprise = delight
- anticipation + fear = anxiety

Ecstasy

At their most intense, joy and smiles become expressions of pleasure and ecstasy. The expression of amorous ecstasy is, however, different from mystic ecstasy. We often hear about the ambiguous nuances of this emotional state, especially in reference to the sculpture of Gian Lorenzo Bernini. Of his works, the *Ecstasy of Saint Teresa* best portrays this, whe-

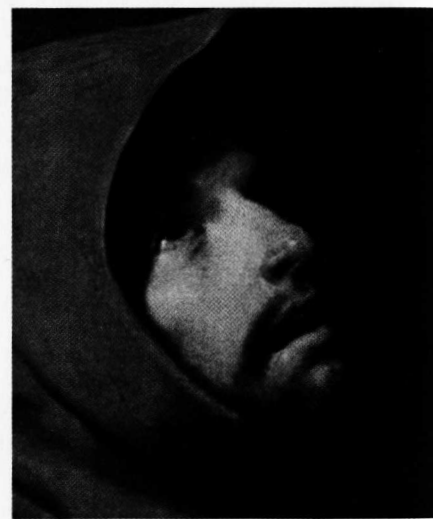
re the memory of an intensely painful yet quite pleasing emotion seem to cohabit her almost abandoned body. In her provocative expression, her head is tilted back, eyes half-closed and rolled back, mouth slightly agape in a delirium of the senses, her muscles completely relaxed. In amorous ecstasy, or rather, orgasm, the eyes are lowered or



Guido Reni, *Saint Sebastian*, 1615-16



Gian Lorenzo Bernini, *Blessed Ludovica Albertoni*, 1672-73



Francisco de Zurbarán, *Saint Francis (detail)*, 1658



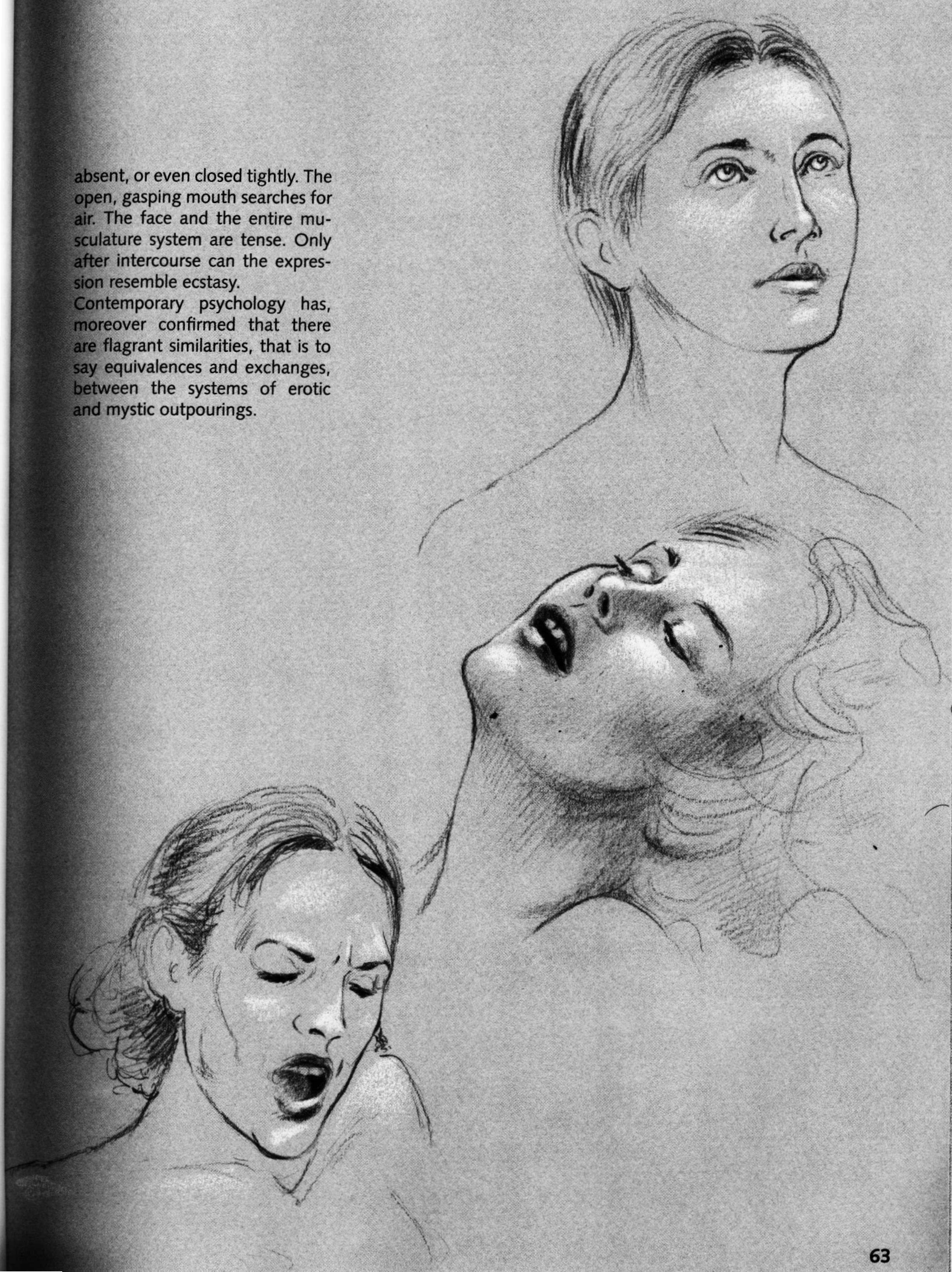
Gian Lorenzo Bernini, *Ecstasy of Saint Teresa (detail)*, 1647-52



Correggio, *Jupiter and Io (detail)*, 1531-32

absent, or even closed tightly. The open, gasping mouth searches for air. The face and the entire musculature system are tense. Only after intercourse can the expression resemble ecstasy.

Contemporary psychology has, moreover confirmed that there are flagrant similarities, that is to say equivalences and exchanges, between the systems of erotic and mystic outpourings.



Joy/Laughter



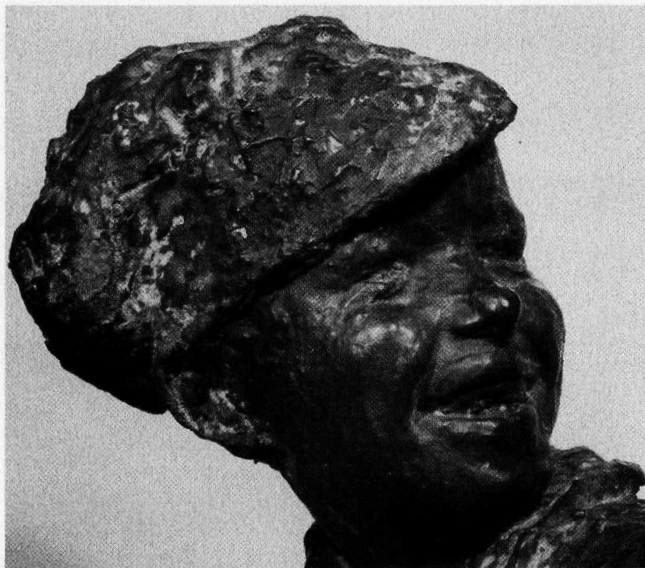
Franz Hals, Laughing Boy, 1620-25



Bartolomé Esteban Murillo, Peasant Boy Leaning on a Sill, 1670-80



Hendrick ter Brugghen, Unequal Couple (detail), 1623



Medardo Rosso, Strillone (Paperboy), 1882-83



William Hogarth, The Shrimp Girl, 1750

Well-being and pleasure find expression in smiling and laughter. When laughing, the face becomes round, the eyes become narrow, but have a certain sparkle, the mouth opens to show the upper teeth, the nose widens and, at the outer sides of the eye, numerous wrinkles form (crow's feet). The eyebrows are lifted and curved; the ears rise up and back. The main muscles involved are the zygomaticus major (contraction), the lower part of the orbicularis oculi of the eye (contraction), and the orbicularis oris of the mouth.



Laughter/Smiling



Guido Mazzoni, Laughing Boy, 1498



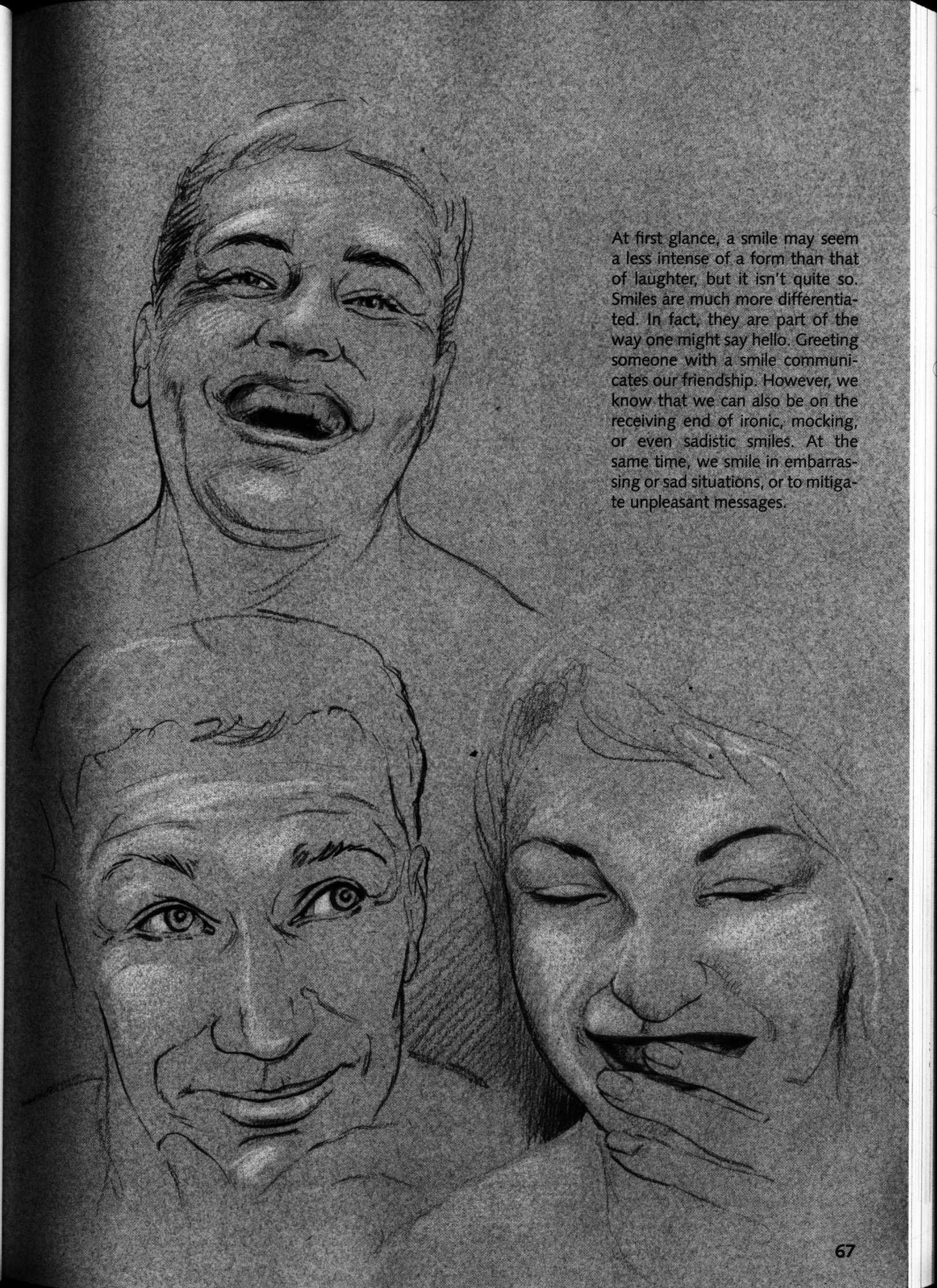
Richard Gerstl, Self-Portrait Laughing, 1908



Anonymous, Bravo making the "Fica" Gesture, c. 1625

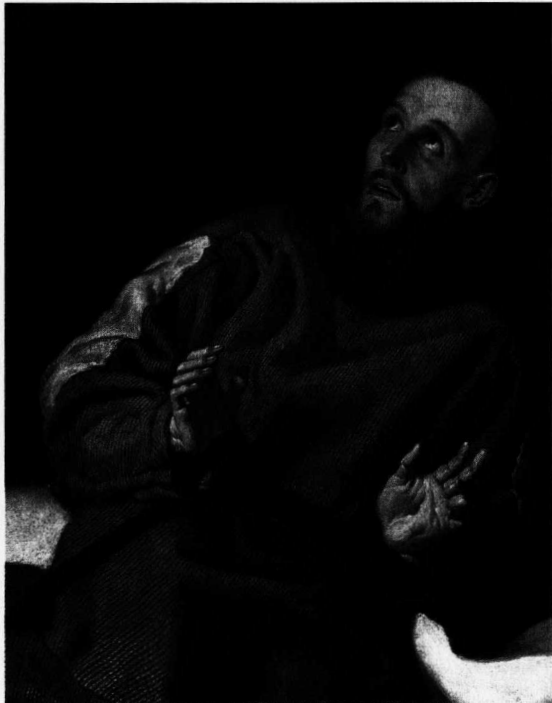


Giovan Francesco Caroto, Portrait of a Boy Holding a Drawing, c. 1520

The image contains three charcoal sketches of human faces, each illustrating a different emotional state. The top sketch shows a man's face with a wide, open-mouthed laugh, his eyes squinted and his head tilted back. The bottom-left sketch shows a man's face with a subtle, closed-mouth smile, his eyes looking slightly to the side. The bottom-right sketch shows a woman's face with a gentle, closed-mouth smile, her eyes closed and her hand near her chin. The sketches are rendered with fine lines and shading, giving them a textured, artistic appearance.

At first glance, a smile may seem a less intense of a form than that of laughter, but it isn't quite so. Smiles are much more differentiated. In fact, they are part of the way one might say hello. Greeting someone with a smile communicates our friendship. However, we know that we can also be on the receiving end of ironic, mocking, or even sadistic smiles. At the same time, we smile in embarrassing or sad situations, or to mitigate unpleasant messages.

Admiration/Adoration



Francisco Ribalta, Saint Francis Comforted by an Angel, 1620



Piero della Francesca, Exaltation of the Cross (detail), 1452-66



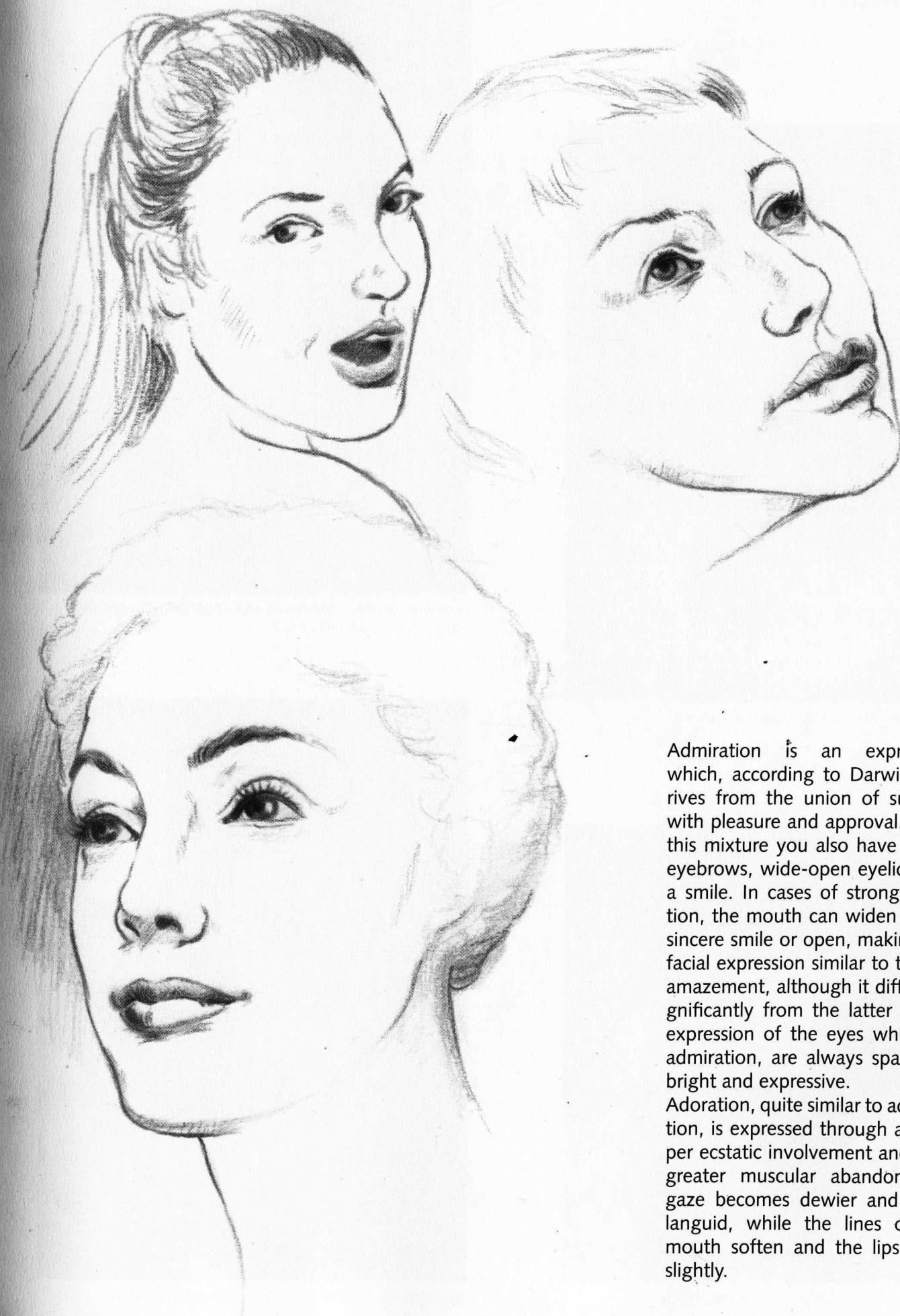
Sandro Botticelli, The Adoration of the Magi (detail), c. 1475



Élisabeth Vigée-Lebrun, Self-Portrait in a Straw Hat, after 1782



Hans Memling, Portrait of a Young Man, 1485-90



Admiration is an expression which, according to Darwin, derives from the union of surprise with pleasure and approval. From this mixture you also have raised eyebrows, wide-open eyelids and a smile. In cases of strong emotion, the mouth can widen into a sincere smile or open, making the facial expression similar to that of amazement, although it differs significantly from the latter in the expression of the eyes which, in admiration, are always sparkling, bright and expressive.

Adoration, quite similar to admiration, is expressed through a sharper ecstatic involvement and thus greater muscular abandon: the gaze becomes dewier and more languid, while the lines of the mouth soften and the lips open slightly.

Affection



Correggio, The Nativity (detail), 1529-30



Leonardo da Vinci, Madonna and Child with Flowers (Madonna Benois) (detail), 1478



Giovanni Boldini, Madame Rejane, 1885



Ghirlandaio, An Old Man and his Grandson, 1480

In expressing affection, the head is often tilted to one side or forwards, indicating the absence of opposition, the mouth hints at a closed-lip smile and the eyes are moist and luminous. If the eyelids are lowered, the muscle contraction is minimal, quite similar to that seen in expressions of joy and pleasure.



Rage/Anger



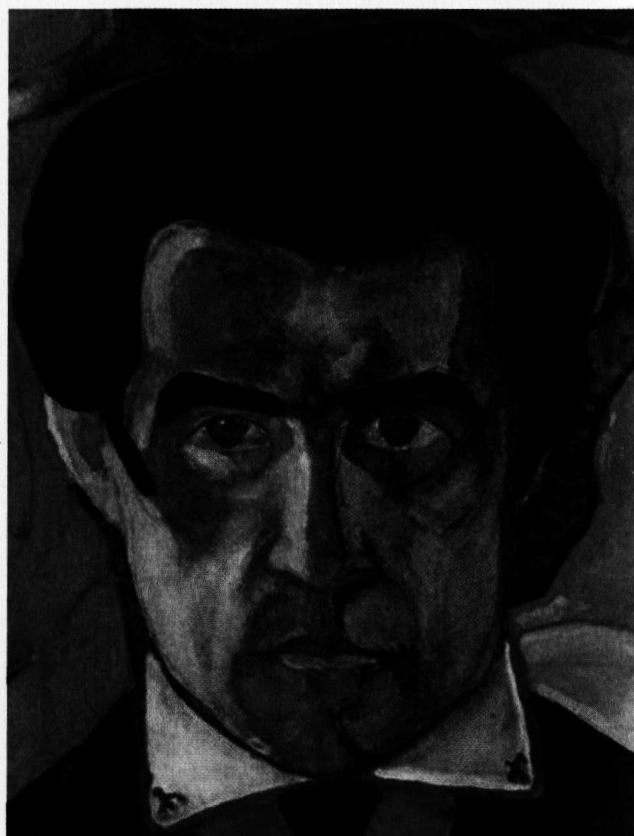
Peter Paul Rubens, David Slaying Goliath (detail), 1630



Egon Schiele, Self-Portrait with Lowered Head, 1912



Paul Cézanne, Self-Portrait (detail), 1873-76



Kazimir Malevich, Self-Portrait, 1908-11

Facial expressions for anger range from simple displeasure to ire and fury.

The eyebrows are lowered towards the root of the nose; the nose, in rage and fury, contracts and the mouth opens. Teeth are clenched, gnashing or opened. The corners of the mouth turn downward.

The main muscles involved are the frontalis, procerus, corrugator supercilii (contraction), transverse part of nasalis muscle, depressor anguli oris and depressor labii inferioris (contraction).

The face of anger is red as it is compressed and uninhibited, about to explode.



Rage/Anger



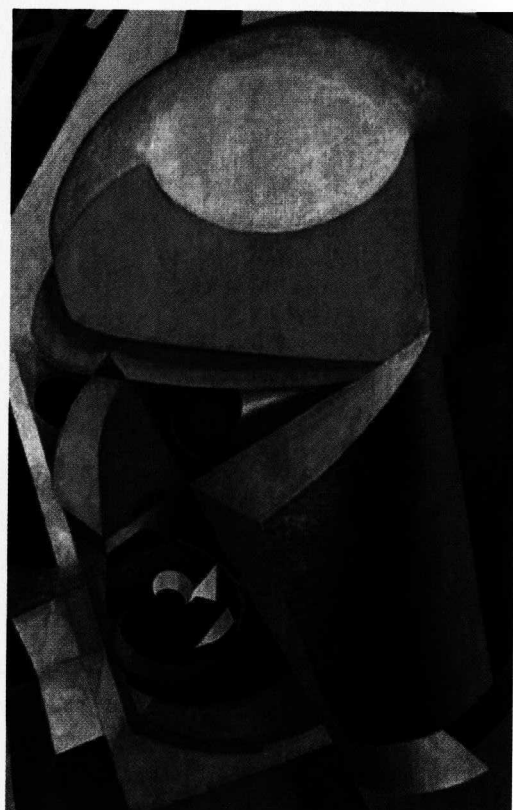
Rembrandt, Christ Driving the Moneychangers from the Temple (detail), 1626



Aniello Falcone, Study for a Head, 1650



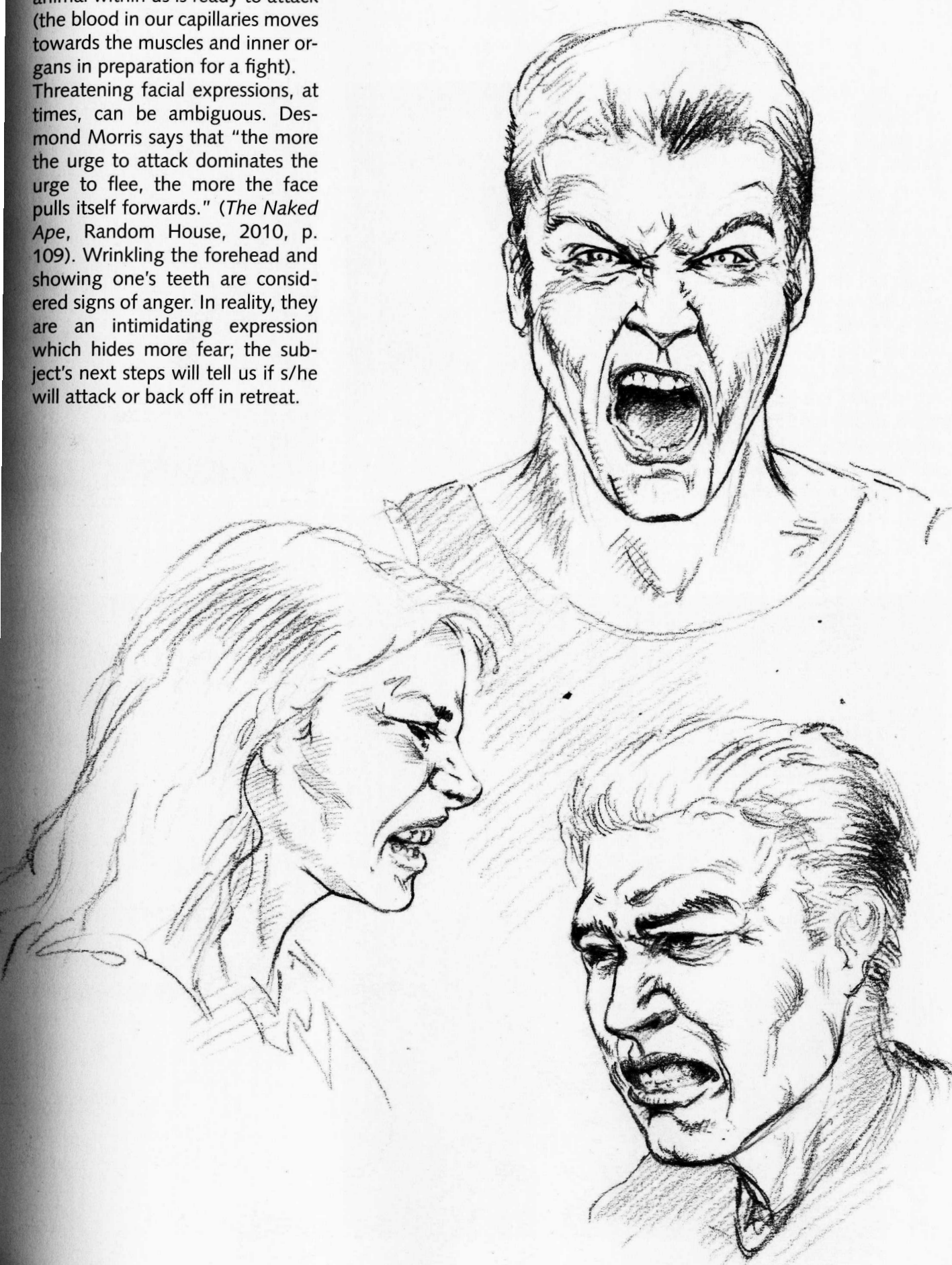
Leonardo da Vinci, Study for a Warrior's Head, 1504



Enrico Prampolini, Portrait of Marinetti, 1924-25

In fury, on the other hand, the face is pale, the lips drawn; the animal within us is ready to attack (the blood in our capillaries moves towards the muscles and inner organs in preparation for a fight).

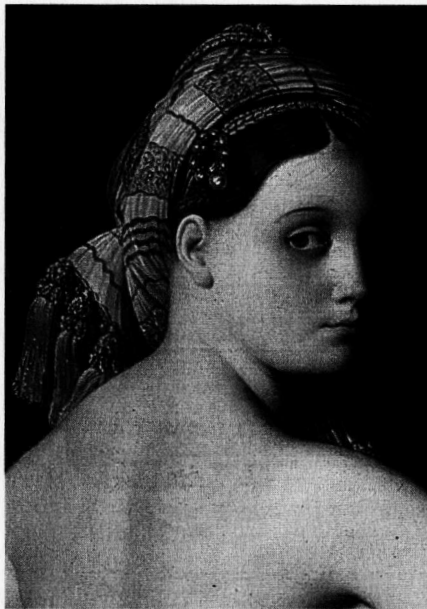
Threatening facial expressions, at times, can be ambiguous. Desmond Morris says that "the more the urge to attack dominates the urge to flee, the more the face pulls itself forwards." (*The Naked Ape*, Random House, 2010, p. 109). Wrinkling the forehead and showing one's teeth are considered signs of anger. In reality, they are an intimidating expression which hides more fear; the subject's next steps will tell us if s/he will attack or back off in retreat.



Attention/Awaiting

From the expression of rest and calm we move, with just a few changes, to that of waiting and attention: a slight contraction of the frontalis muscle, the bending of the eyebrow, and increase in the opening of the eyes (and of the pupil), and at times an imperceptible opening of the mouth.

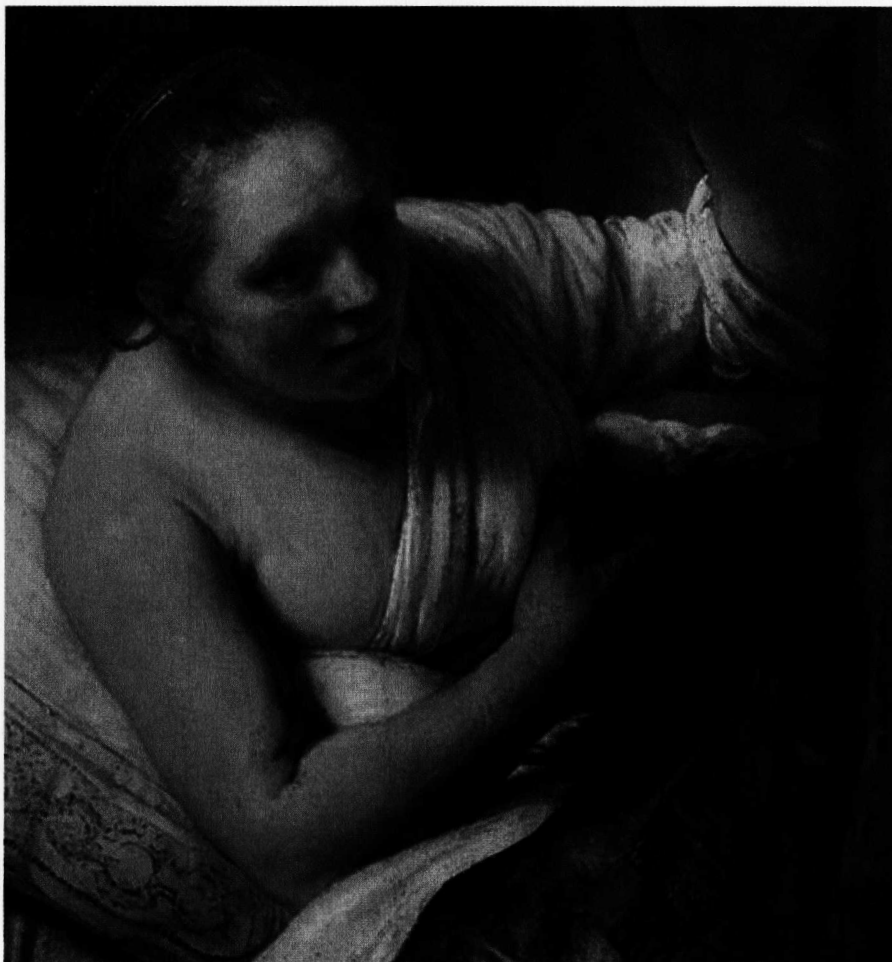
In some cases, if the subject is slightly excited, the teeth gently bite the lower lip or perhaps even an object (the intensity of the grip increases if it is associated to a negative emotion, such as anxiety or apprehension). Some individuals, in situations of intense concentration, let the tip of their tongue stick out from their mouth.



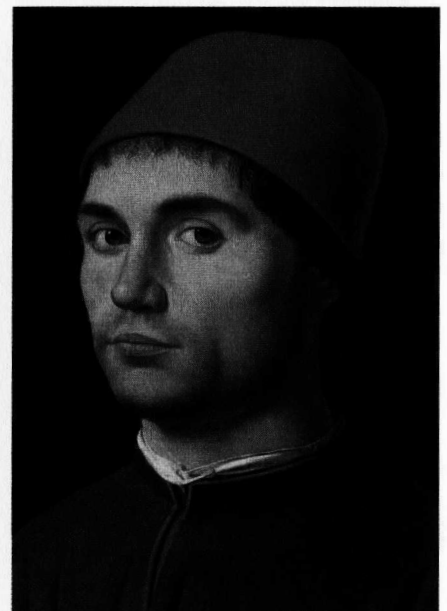
Jean-Auguste-Dominique Ingres, Grande Odalisque (detail), 1814



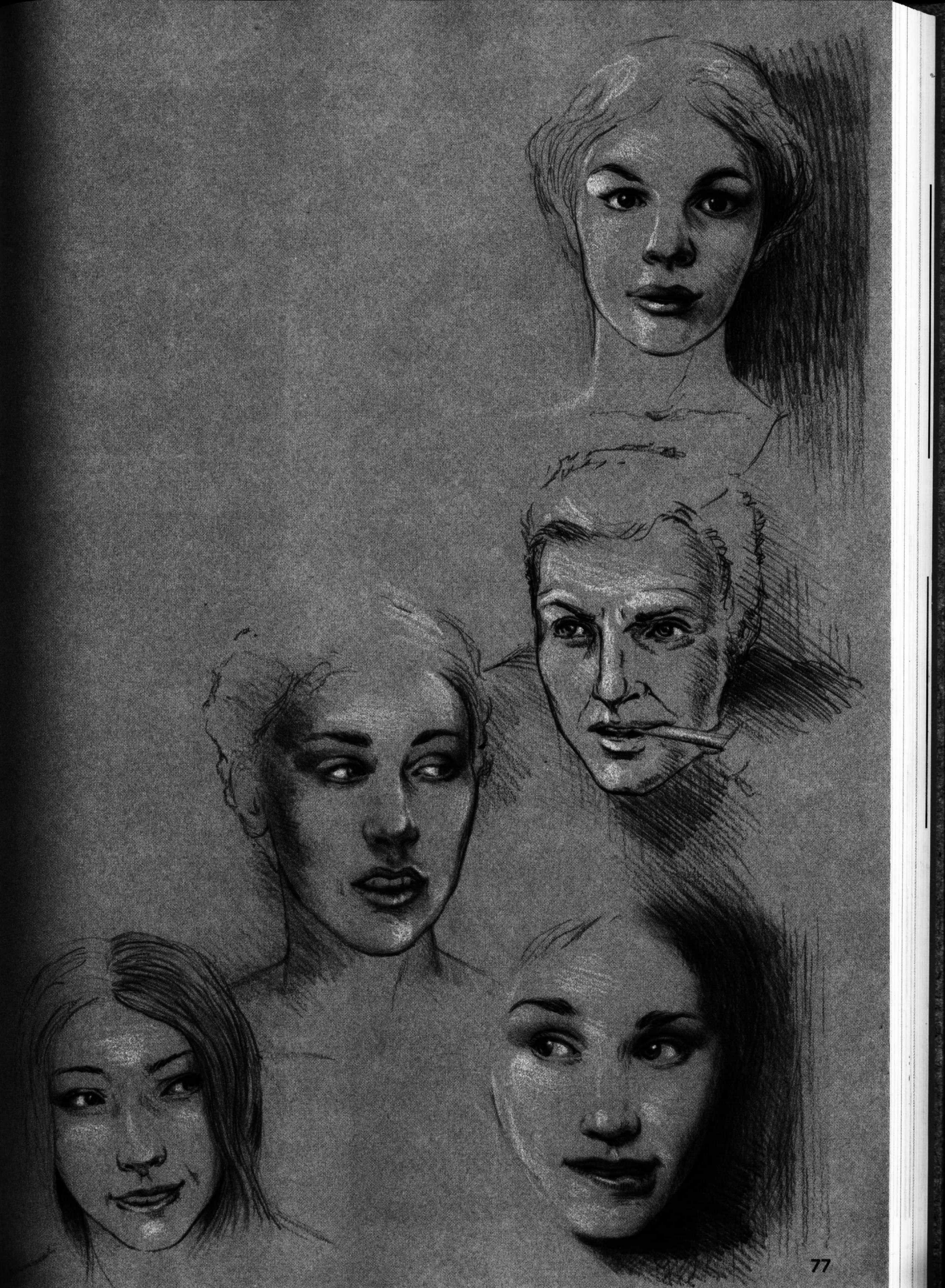
Frans Hals, The Gypsy Girl, 1628-30



Rembrandt, Sara Waiting for Tobias, 1647



Antonello da Messina, Portrait of a Man, 1475-76



Attention/Alert



Jacopo da Pontormo (or Angelo Bronzino?), Saint Matthew, 1525-1528



Andrea Mantegna, Triumph of the Virtues (detail), 1499-1502



Rembrandt, The Night Watch (detail), 1642

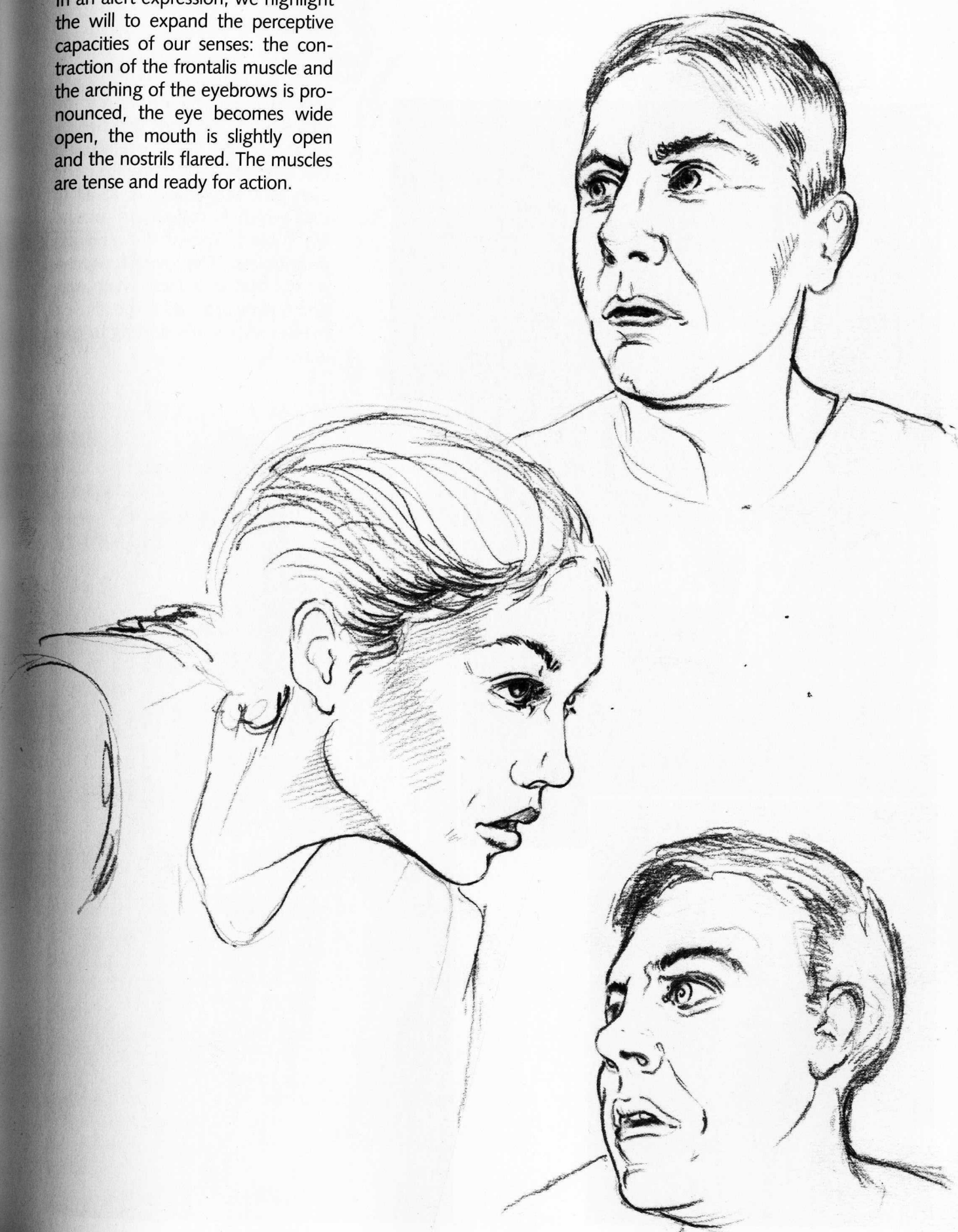


Diego Velázquez, Apollo in the Forge of Vulcan (detail), 1630



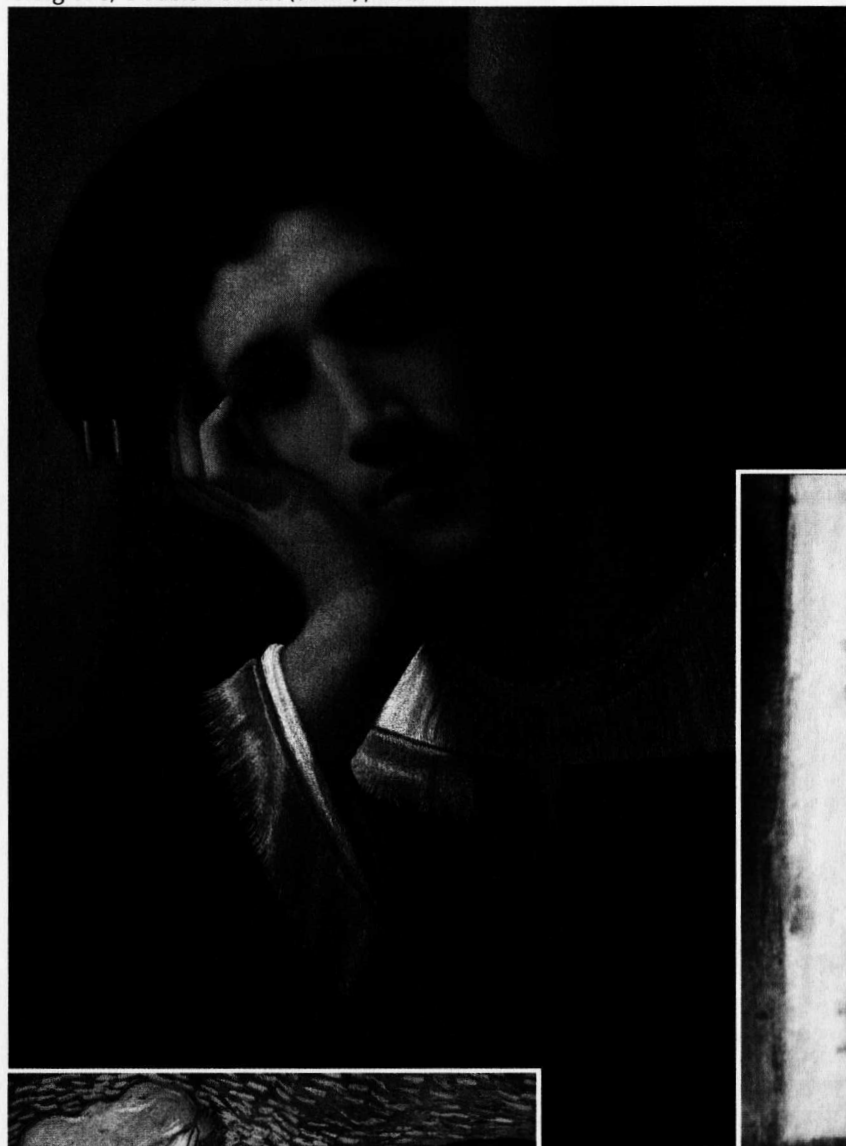
Francesco Hayez, The Lampugnani Conspiracy (detail), 1826

In an alert expression, we highlight the will to expand the perceptive capacities of our senses: the contraction of the frontalis muscle and the arching of the eyebrows is pronounced, the eye becomes wide open, the mouth is slightly open and the nostrils flared. The muscles are tense and ready for action.



Sadness/Melancholy

Giorgione, Double Portrait (detail), 1502



Melancholy is manifested by the wrinkling of the brow and the lowering of the upper eyelids and the corners of the mouth. The eyes, not very attentive at all to that which is happening around the subject, appear dull and expressionless. The overall expression is that of a face which drops downwards, as if the muscle masses were softly starting to give way.



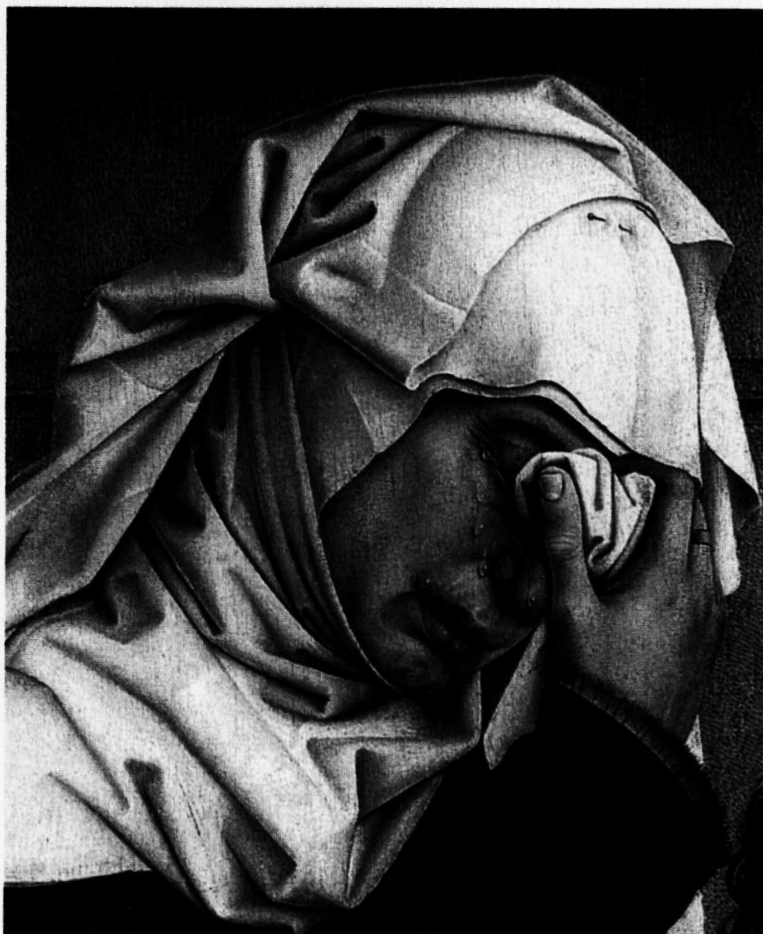
Vincent Van Gogh, Portrait of Doctor Gachet, 1890



Edgar Degas, L'Absinthe, 1873



Sadness/Crying



Rogier van der Weyden, The Descent from the Cross (detail), 1433-35



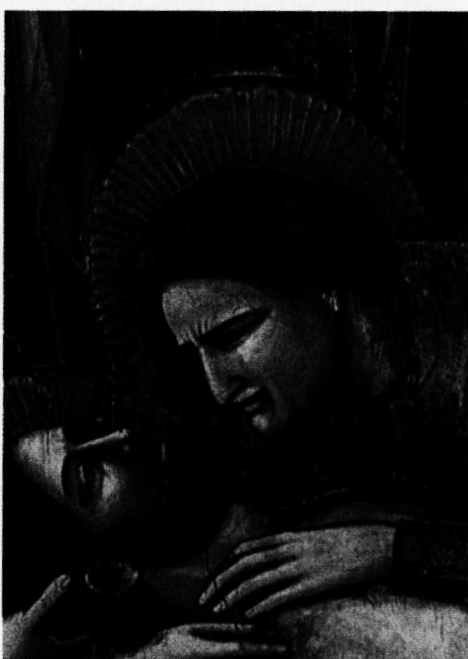
Donato Bramante, Democritus and Heraclitus (detail), 1478-88



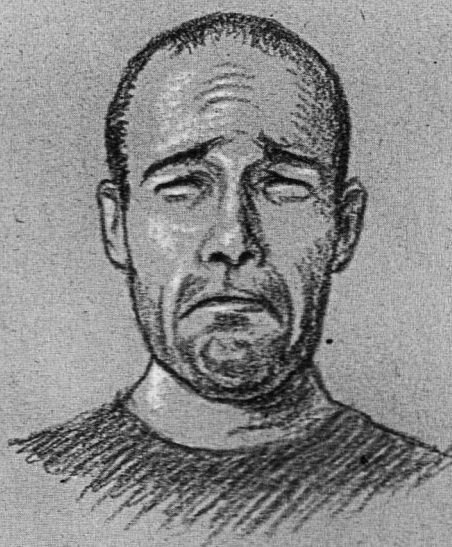
Niccolò dell'Arca, Lamentation over the Dead Christ, 1463-90



Guido Mazzoni, Lamentation over the Dead Christ, 1480-85



Giotto, Lamentation of Christ (detail), 1303-05



Crying is the strongest sign we can provide about our emotional state (as well as the first). All mammals, if frightened or in pain, have some sort of sharp crying yelp.

As a visual stimulation, the expressive character that the face has with just the corners of the mouth pointed downward is unique, just as is its opposite (the smile).

The mouth alone can thus communicate, apparently, sadness or happiness.

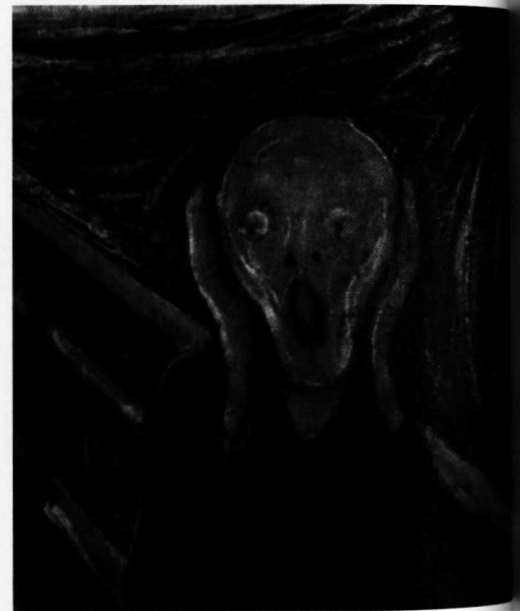
Anguish/Pain



Adolfo Wildt, Saint Lucy, 1926

There are numerous expressions of sadness, from melancholy to crying, up to the expression of anguish and pain. The eyebrows contract and are lowered, the procerus muscle lowers the middle part of the skin on the forehead and the medial eyebrows create the short transversal wrinkles on the root of the nose.

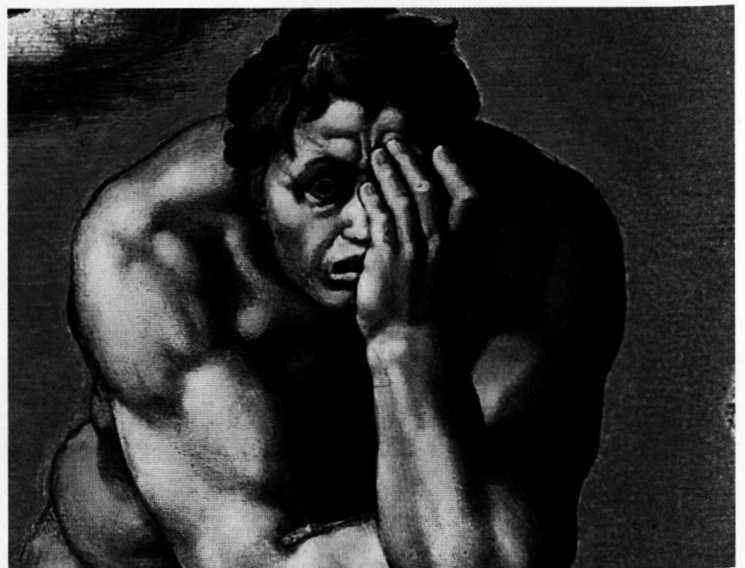
There is a narrowing of the eyes, the corners of the mouth are



Edvard Munch, The Scream, c. 1910



Caravaggio, The Sacrifice of Isaac (detail), c. 1598



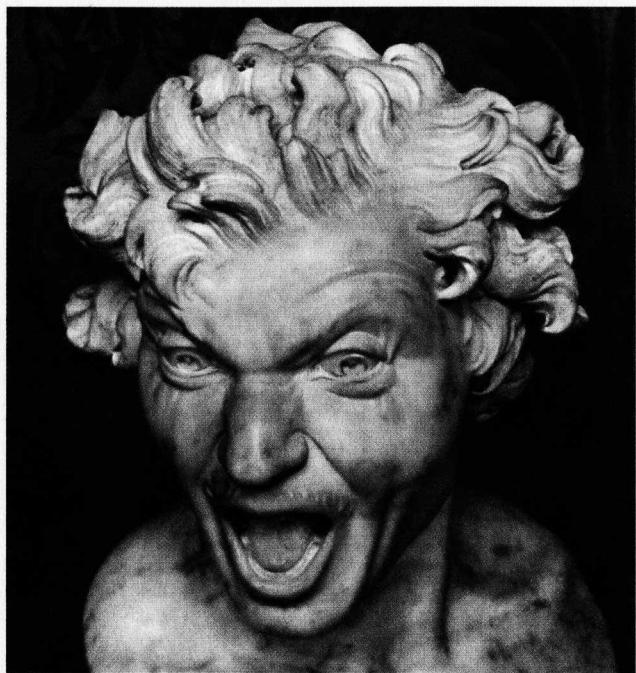
Michelangelo, The Last Judgement (detail), 1535-41

lowered and, at the lower part of the nose, two characteristic grooves form at the mouth. The upper lip curves inward and drops down, the lower lip curves outward and rises, the chin rises.

The main muscles involved are the frontalis (contraction), the procerus, the corrugator supercilii, and the levator labii superioris group.



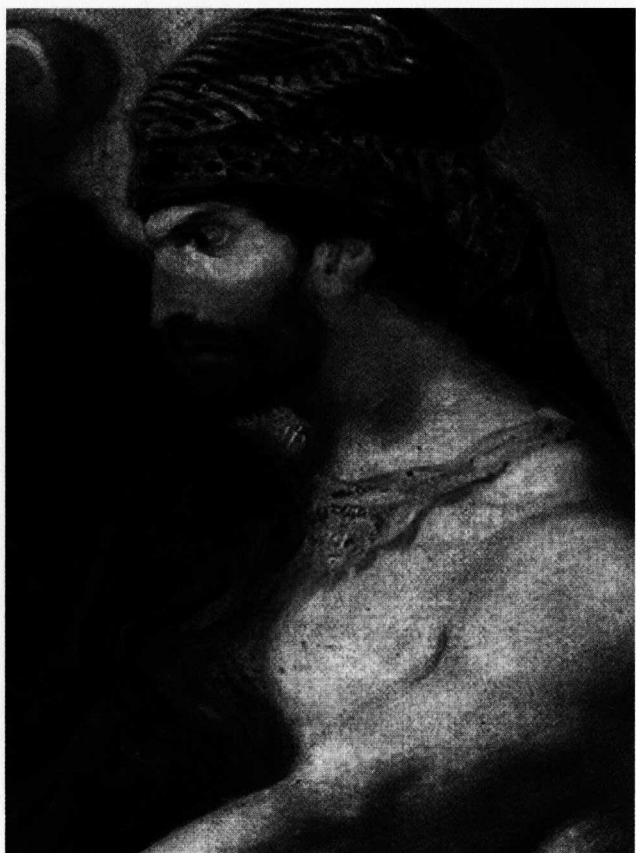
Hate



Gian Lorenzo Bernini, Damned Soul, 1619



William Blake, Sin and Death, detail of Satan, 1808

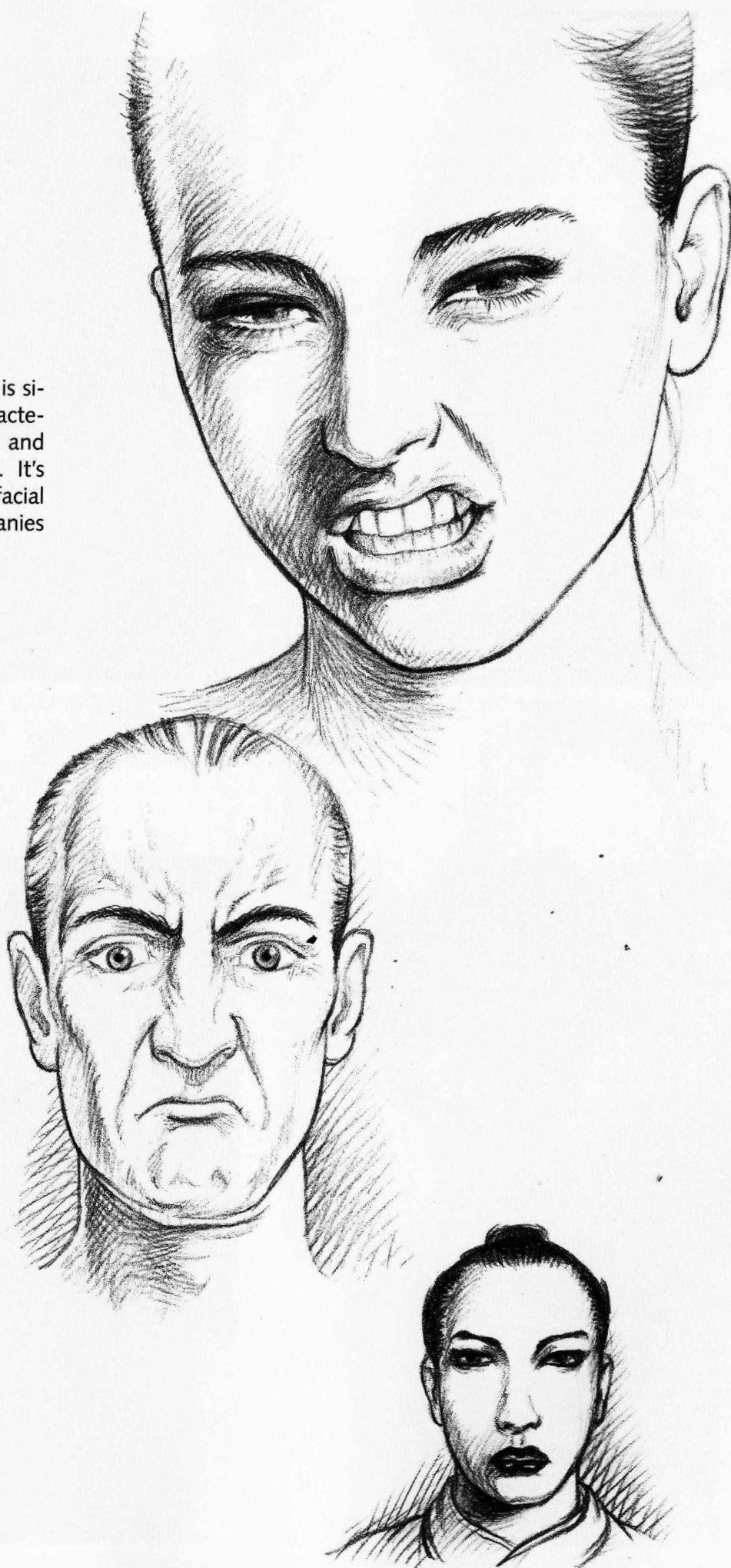


Eugène Delacroix, Death of Sardanapalus (detail), 1827



Hieronymus Bosch, Christ Carrying the Cross (detail), 1515-16

The facial expression of hate is similar to displeasure, but characterised by a hard, fixed gaze and a constriction of the pupils. It's one of the most ferocious facial expressions and it accompanies combative gestures.



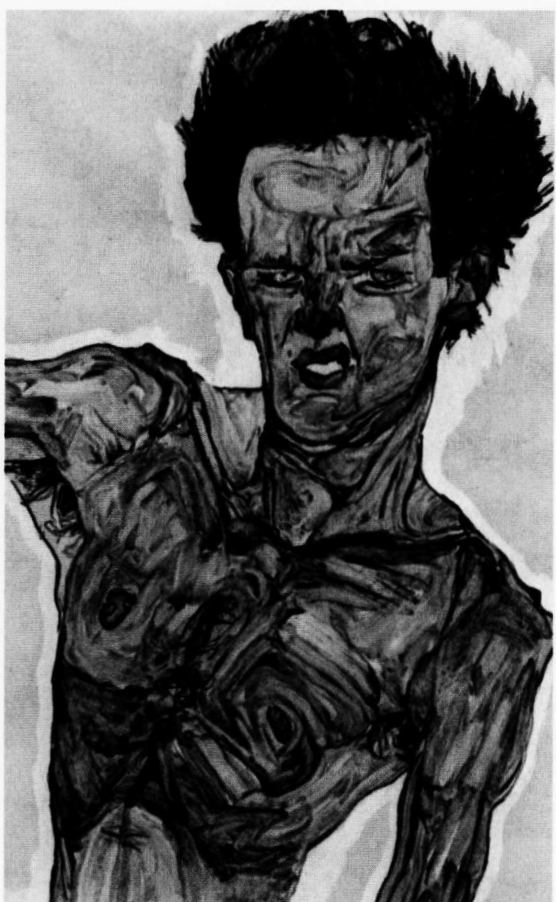
Disgust



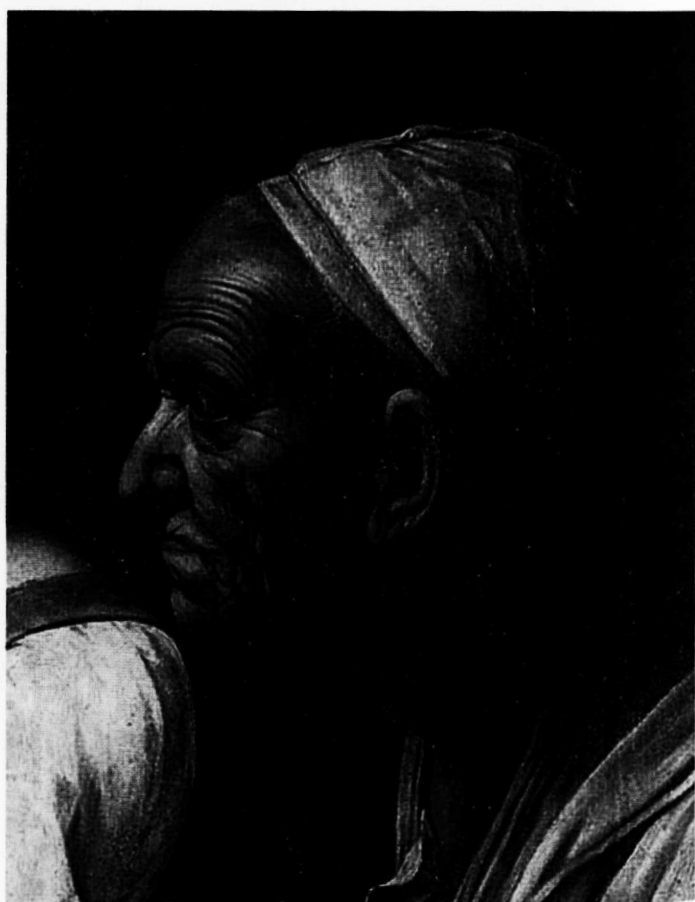
Niccolò dell'Arca, Lamentation Over the Dead Christ (detail of Saint John), 1463-90



Honoré Daumier, Laurent Cunin, c. 1832



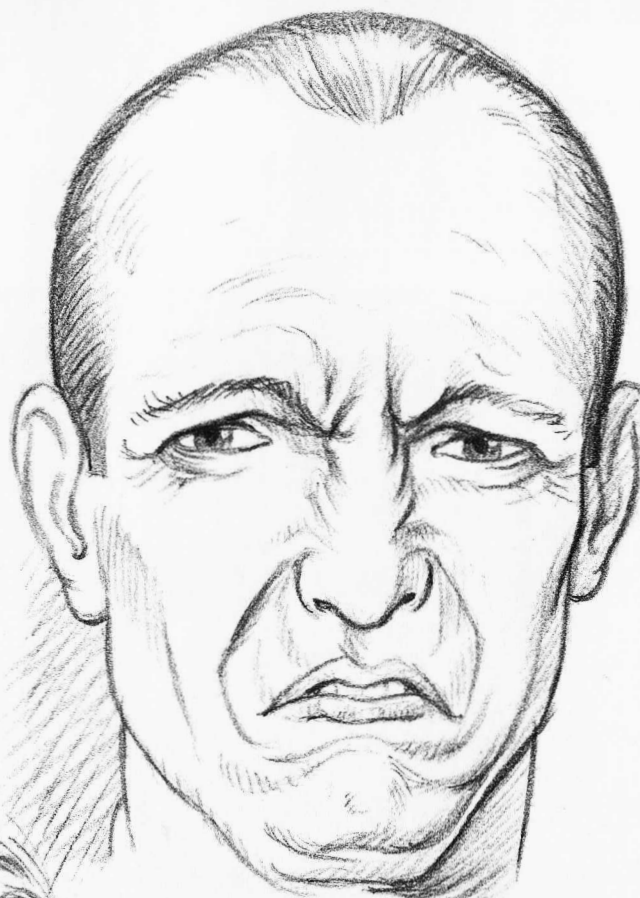
Egon Schiele, Self-Portrait, 1910



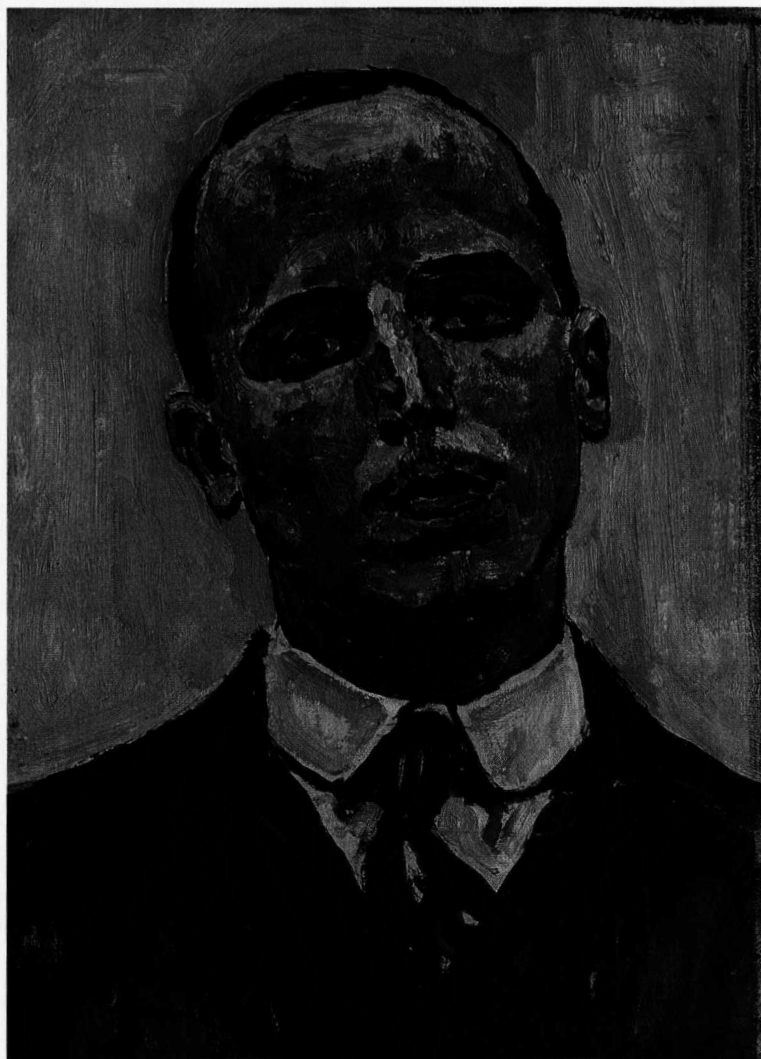
Caravaggio, Judith Beheading Holofernes (detail), 1599

Disgust is displayed in a similar way as revulsion. Also similar, but much less pronounced, are faces of contempt. Disgust is marked by a squinting of the eyes, the sides of the mouth angle downwards, the lower lip rises and sticks out, taking on the characteristic shape (it's that of vocalized revulsion "YUCK"). The nose produces transverse folds (wrinkling of the nose).

The main muscles involved are the orbicularis oris, the transverse muscles of the nose, and the levator labii superioris (alaeque nasi) (contraction).



Boredom



Ferdinand Hodler, Portrait of Josef Müller, 1916

With boredom, the face "turns off". The loss of facial muscle tone results in a lowering of the eyelids, which then cover a good part of the iris; the gaze is fixed and lacks liveliness, the corners of the mouth tilt downwards and the lips open slightly due to the jaw relaxing. Extreme boredom is expressed through yawning, the physical manifestation of a state of numbness which has reached its peak.



Fra Galgario (born Vittore Ghislandi), Portrait of a Knight of the Constantinian Order (detail), 1745



Édouard Manet, The Bar at the Folies-Bergère, 1881-82



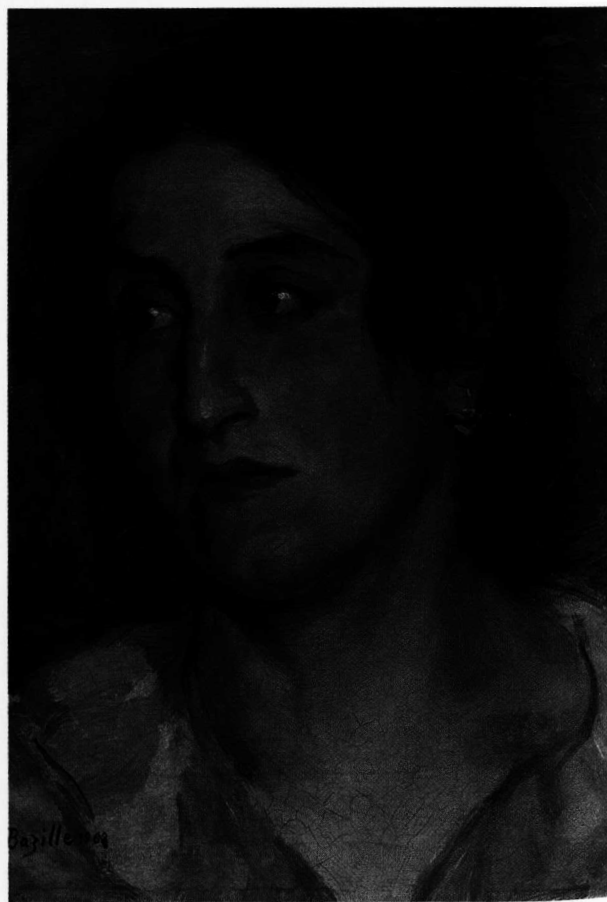
Distraction



Le Sueur, A Gathering of Friends, c. 1640



Vittorio Corcos, Dreams, 1896



Frédéric Bazille, Portrait of a Woman, 1868



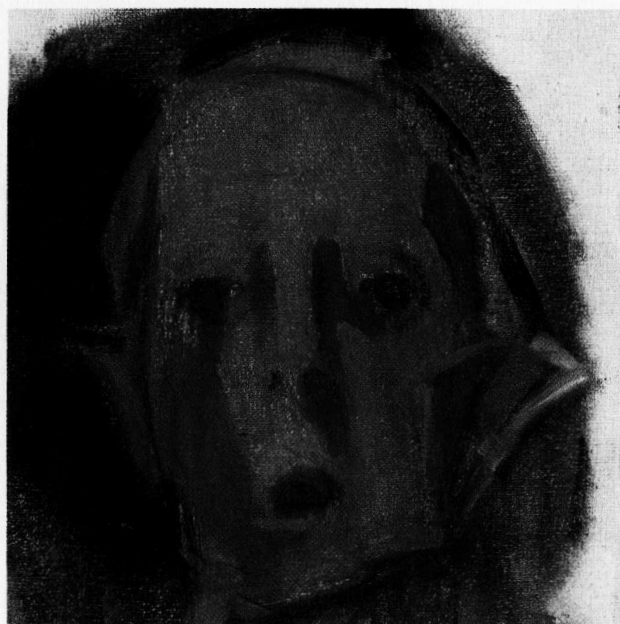
In states of distraction, the face takes on a rather non-expressive quality. Rather than relating or communicating, it tends to avoid interaction with the surroundings. The face is disengaged or looking elsewhere, not at the interlocutor, and at times the eye-balls rotate upward and the eyes seem to stare off into the void.

S u r p r i s e / A m a z e m e n t

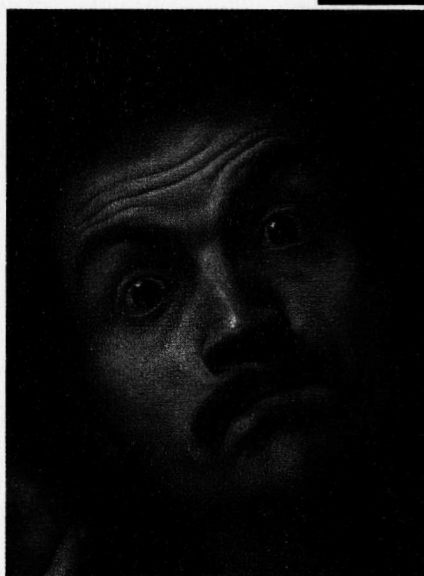
Open mouth, wide eyes, raised eyebrows and an astonished gaze: this is the classic expression of amazement. The transition from amazement to surprise is easy: just accentuate the expression's characteristics. That is: gaping mouth, arching eyebrows and a furrowed brow, wide eyes. Facing an entirely unexpected and threatening, as with fright, involves the maximum contraction of the frontal muscle.



Francisco Goya, The Third of May, 1808 in Madrid, 1808



Helene Schjerfbeck, Omakuva, 1945



Pietro Bellotti, Self-Portrait as Stupor, 1654-55



William Hogarth, David Garrick as Richard III (detail), 1745



Luigi Russolo, Self-Portrait, 1909



Worry/Anxiety



Gustave Courbet, The Desperate Man (Self-Portrait), 1844-45



Ernst Ludwig Kirchner, Self-Portait as a Sick Man (detail), 1918



Pompeo Batoni, Study of a Head, 1760

Apprehension and anxiety are manifested in ways which are not dissimilar from awaiting. The contraction of the frontalis muscle, is accompanied by the arching or the furrowing of the brow, according to whether the emotion is more linked to a fear of something unexpected or a state of worry over something noticed. The eyes are often wide open, alert and moving. The corners of the mouth, which may be more or less open, are turned downwards.



Edvard Munch, Self-Portrait in Hell (detail), 1903



Fear/Terror



Caravaggio, Medusa, 1597

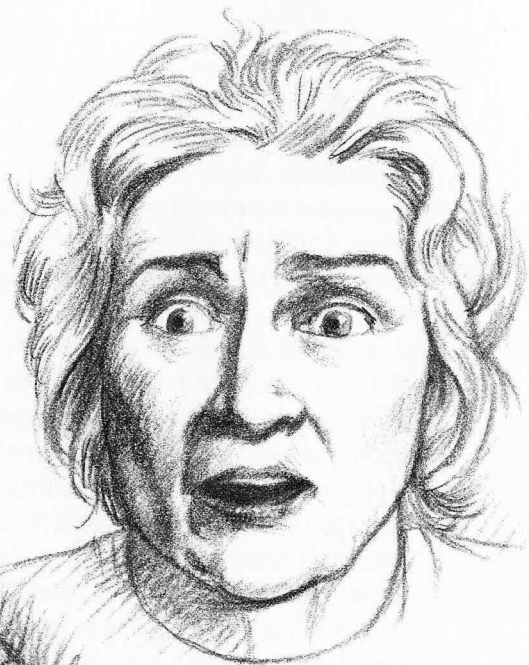


Guido Reni, The Massacre of the Innocents (detail), 1611



Gian Lorenzo Bernini, Apollo and Daphne (detail), 1622-25

Facial expressions of surprise are the dynamic progression of awaiting; the greater degree of contraction of the frontalis muscle and the consequent opening of the mouth give the impression of surprise and amazement. The total contraction of the frontalis muscle and the constriction of the nostrils then produce the impression of fear and terror. In moments of intense fright, the face becomes pale and the hair stands on end.



In addition to being the preferred system of indicating emotions and interpersonal attitudes, the face transmits information related to mental processes (concentration, uncertainty) and participates significantly in the production of conversational signals.

This practice is called "paralinguistic" and is used to maintain constant contact with the person being spoken to. We continuously engage in these gestures, whose meaning varies according to the conversational context or the culture one belongs to, which involve not just the face, but also other parts of the body.

This category also includes those expressions which are generically called grimaces. In addition to emotional expressions, Paul Ekman and Wallace Friesen divided paralinguistic gestures into four other categories: **Emblems**, which are always voluntary, make up or modify the sense of the discussion (for example, raising one's eyebrows may express doubt, the wink of an eye expresses understanding and complicity, puffing and looking upward means "I can't stand you").

Illustrators, which are often voluntary, used to underline part of the discussion or which serve to indicate a position in space (for exam-



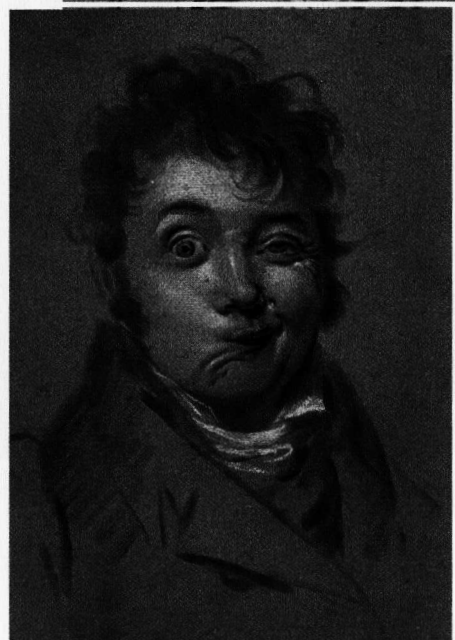
Louis-Léopold Boilly, Thirty-six Faces of Expression, 1822

ple, eyebrows raised in the centre reinforce an unpleasant message, or a rotation of the gaze and a nod of the head indicate a person or location).

Regulators keep the communication lively in absence of verbal expression, alternating with words during pauses (for example, we nod with our head or raise the eyebrows to invite the other person who is talking to continue, or we open our mouth, as if we would like to talk to interrupt him/her).

Adaptors are the most ambiguous of the gestures. Within commu-

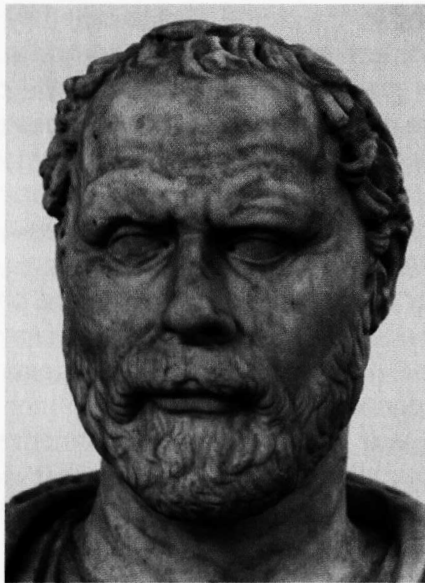
nication, they occupy a marginal significance, often casual and irrelevant to the context (biting one's lips or moistening them continuously with the tongue, closing the eyes tight or clenching one's jaw). The expressive importance of the face increases, hand in hand, with the species' phylogenetic development. It seems logical to say that facial expression is much more developed among species which live in permanent communities and for whom that development has an adaptive function for social interaction.



A few self-portraits by Louis-Léopold Boilly

Vexation

Wrath is the visual manifestation of puzzlement, concentration and mental effort. It's the typical manifestation of the activity of thinking intensely. The absolute star of this expression is the corrugator supercilii which is linked to the frontalis and the procerus. At times even the depressor anguli oris and the depressor labii inferioris participate in the expression, furrowing and lifting the chin.



Polyeyktos, Demosthenes, 3rd century BC (Roman copy from the 2nd century AD)



Raphael, Ecstasy of Saint Cecilia (detail), 1514-16



Luca Signorelli, Self-Portrait in the chapel of San Brizio in the Duomo of Orvieto, 1499-1502



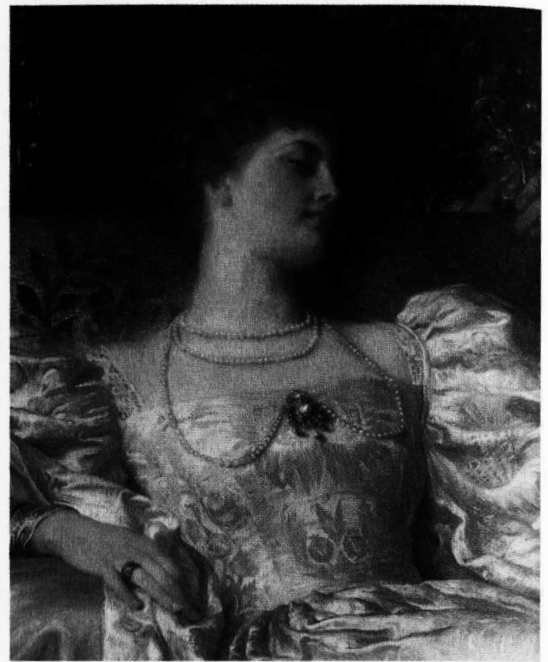
Auguste Rodin, The Thinker, 1880



Pleasure/Wellbeing



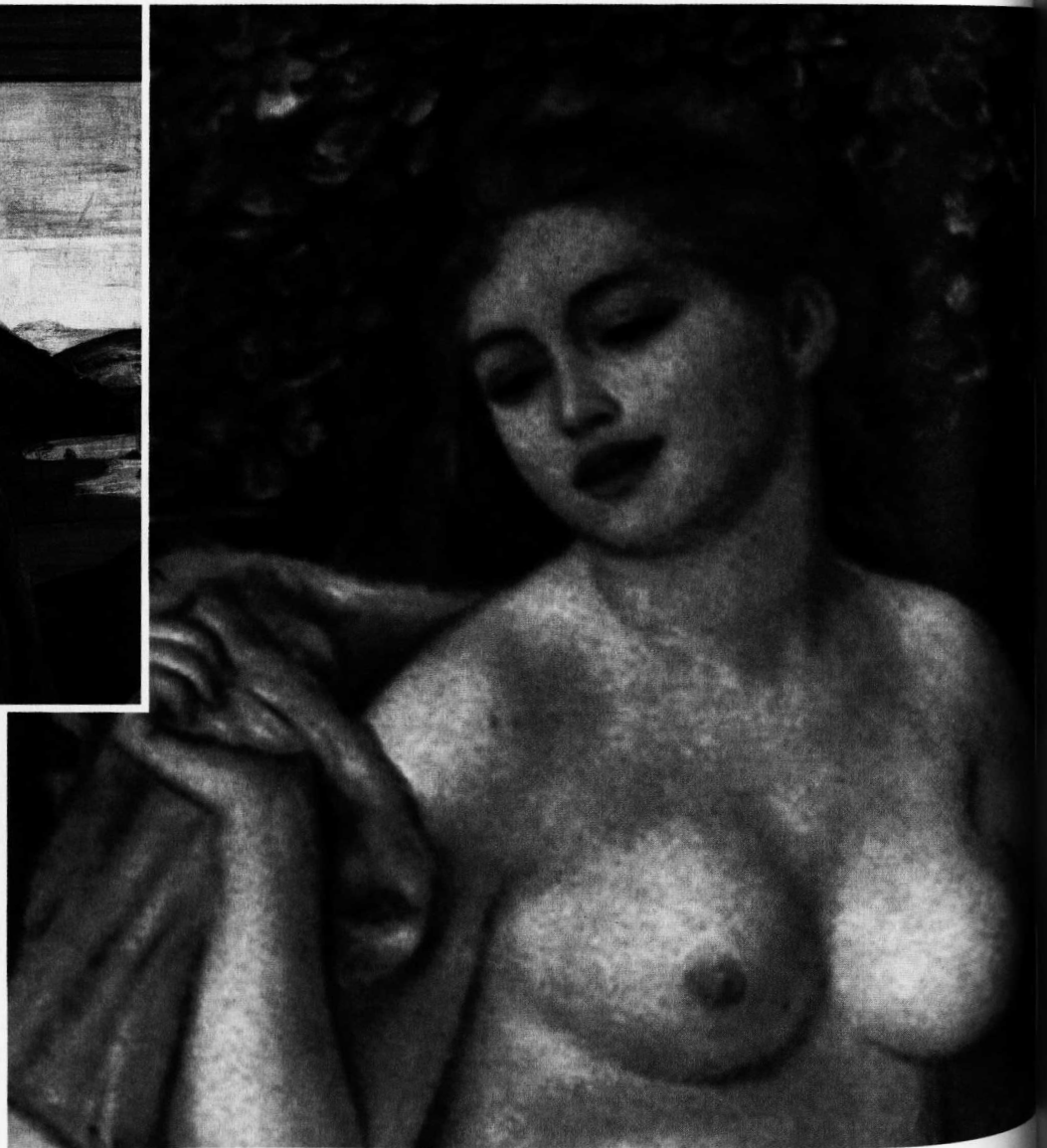
Gustav Klimt, Death and Life (detail), 1908-15



Sir Frank Dicksee, An Offering (detail), 1898



Sandro Botticelli, Madonna and Child with an Angel, c. 1470



Pierre-Auguste Renoir, The Bathers (detail), 1887

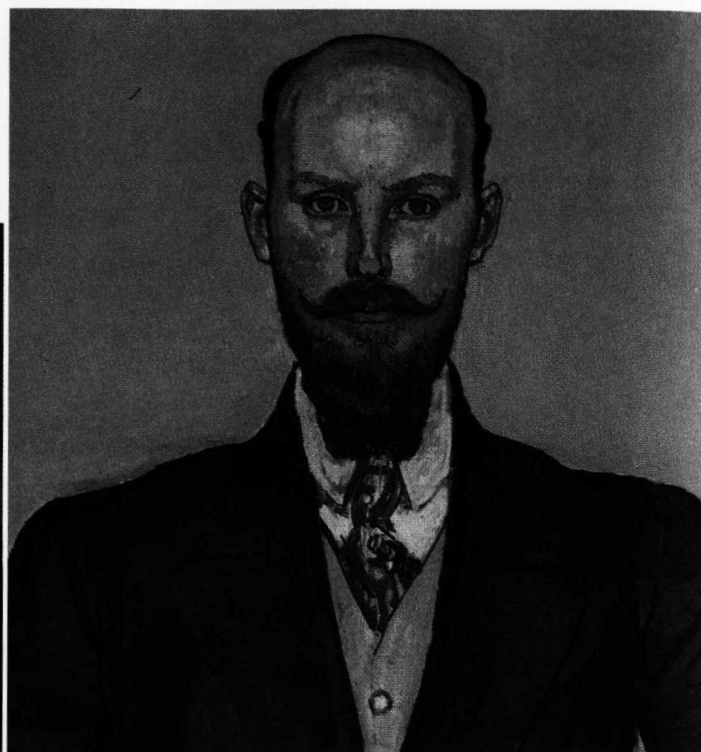


Relaxed facial features, the semi-closed eyelids and a barely-there smile are indicators of a state of wellbeing. As pleasure increases, a few expressive variations can communicate the degree of intensity: eyebrows tend to rise upwards, nostrils expand and the smile becomes more evident until the mouth opens almost completely. Due to relaxed neck muscles, the head tilts to the side or backwards.

Pride



Giorgione, Portrait of a Venetian Gentleman, c. 1510



Ferdinand Hodler, Portrait of Willy Russ, 1911



Fra' Galgario (born Vittore Ghislandi) attr., Portrait of a Doge, 1743



Antonello da Messina, Portrait of a Man (Trivulzio Portrait), 1476



Honoré Daumier, Two Lawyers (detail), 1848



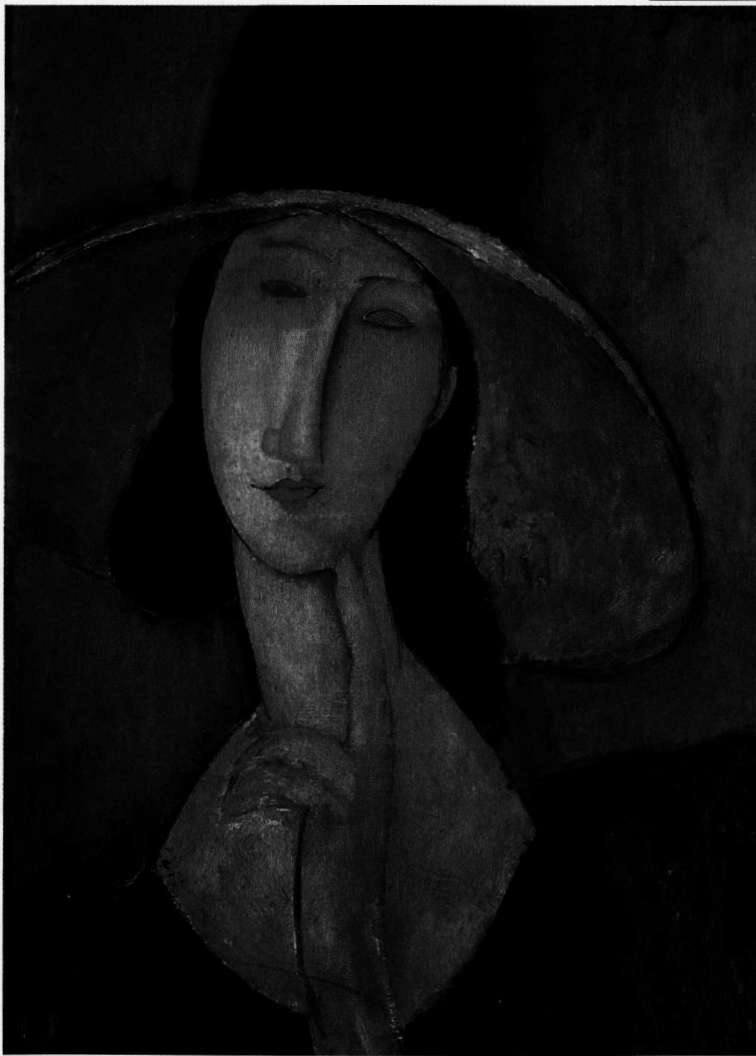
There are various ways to express pride. The most typical of them is with the head raised and slightly tilted back, with the jaw angling upward, a stern, haughty gaze. It's a challenging attitude in which one tries to highlight his/her superiority. When someone is proud in front of others due to a result obtained, they flaunt an open, toothy smile and a satisfied, direct gaze. When one's pride is wounded, the brow wrinkles, the eyes tend to look at a point on the horizon, the face reddens, the jaw tightens, contracted, and the jaw moves upward towards the lower lip.

Uncertainty

That which most characterises uncertainty and doubt is the asymmetry of the expression. The face mirrors inner hesitation, so the mouth wrinkles and moves to the side with the corners at different heights, the mouth's closure line becomes even more undulating, the eyes open differently, with one eyebrow raised and the other lowered, and the gaze is often turned upwards or to the side.



Raphael, Portrait of Tommaso Inghirami, 1510-12



Amedeo Modigliani, Portrait of Jeanne Hébuterne in a Large Hat, 1917



Lorenzo Lotto, Portrait of a Man, c. 1520



Embarrassment

Embarrassment is generally expressed by blushing of the cheeks, which can be rather intense, and through the contraction of the muscles of the mouth. These muscles create an asymmetrical, forced grin which is an attempt to garner the observer's favour. The gaze becomes bewildered and naive and it becomes difficult to look at the other person directly. When the sense of shame intensifies, people often raise a hand to cover the face (partially or entirely), as if trying to conceal the emotions which s/he is feeling.



Johann Heinrich Tischbein, Hercules and Omphale (detail), 1754



Mary Stevenson Cassatt, Self-Portrait (detail), c. 1880



Jean Baptiste Greuze, Young Peasant Boy, c. 1763



Toulouse-Lautrec, Yvette Guilbert (detail), 1894



Jealousy/Envy



Jean-Auguste-Dominique Ingres, Paolo and Francesca, 1819



Théodore Géricault, Insane Woman (Woman Alienated by Envy), 1822-23

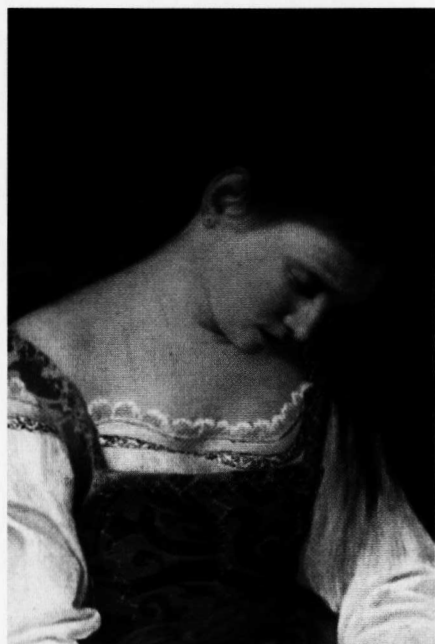


Henri de Toulouse-Lautrec, In the Restaurant La Mie, 1891

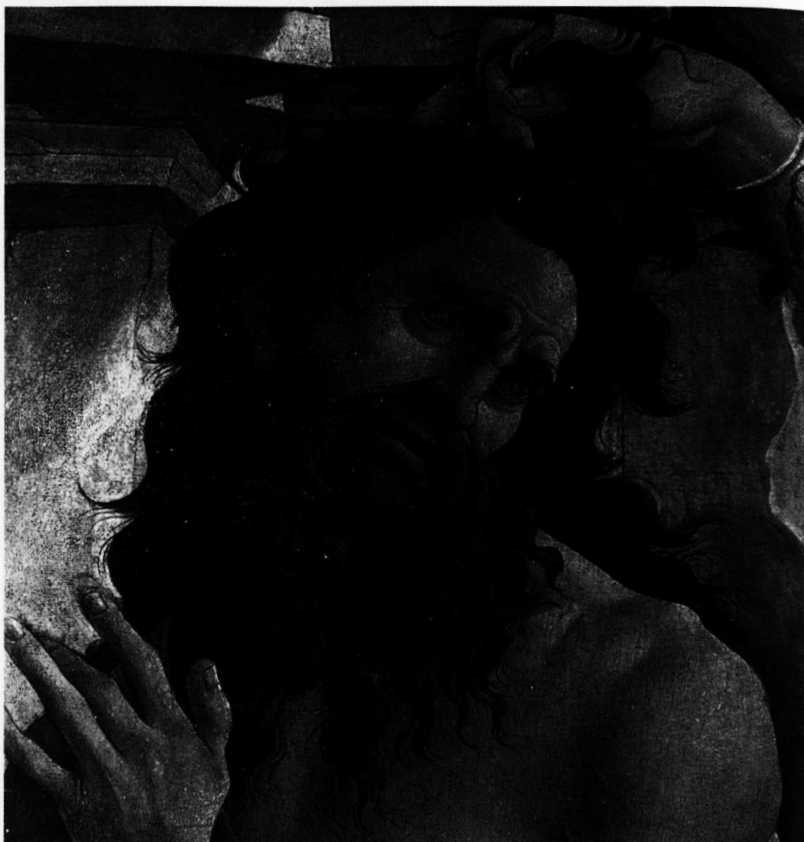


Jealousy and envy manifest themselves through a wide and controversial range of expressions. However, we can identify a few constants between them. The opening of the eyelid is limited and the eyes become two slits through which a cutting look darts out. The gaze is never front-on and direct. The eyebrows are often furrowed. The eyebrows are often creased. The nostrils are quivering and flaring. The lips are stiff and the corners of the mouth are turned down in a frown. In addition, it's quite common to grind the teeth, as when expressing hate, or for the lower lip to protrude and rise upward, as with disgust.

Guilt



Caravaggio, *Penitent Magdalene (detail)*, 1594-95



Sandro Botticelli, *Pallas and the Centaur (detail)*, c. 1482-85



Artemisia Gentileschi, *Penitent Magdalene*, 1630

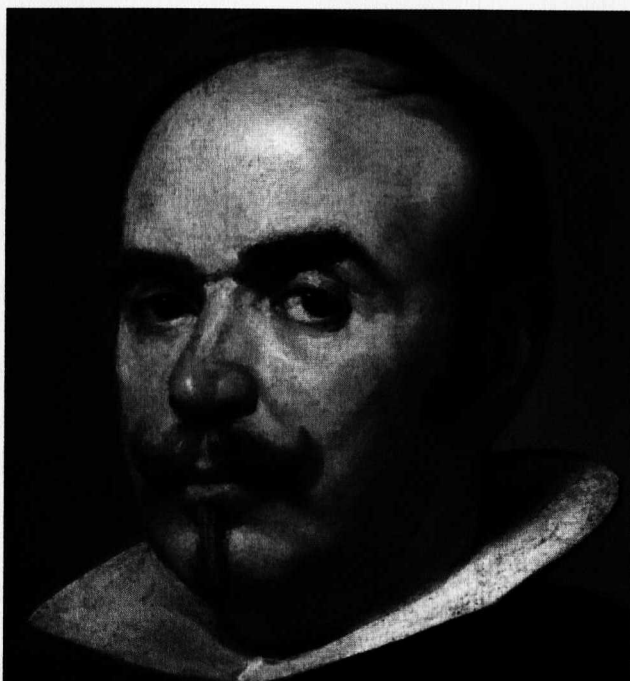
Sadness, vexation and embarrassment all seem to factor in to a sense of guilt. We thus have a variety of expressions which include the following characteristics consistently: a furrowed brow with eyebrows raised eyebrows in their centres, wet, often closed eyes, lowered corners of the mouth, the head slightly tilted forward.



Paul Gauguin, *Breton Eve*, 1889



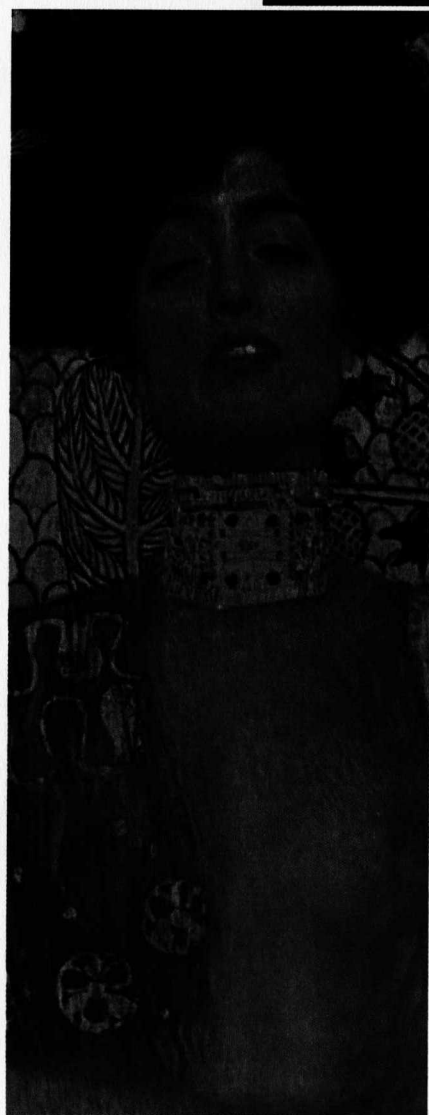
Disapproval/Contempt



Diego Velázquez, Don Pedro de Barberana y Aparregui, c. 1631



Egon Schiele, Self-Portrait with Physalis (detail), 1912



Gustav Klimt, Judith and the Head of Holofernes (detail), 1901



Francisco Goya, Portrait of Don Andres Del Peral, 1798



Jean-Auguste-Dominique Ingres, Portrait of Monsieur Bertin, 1832

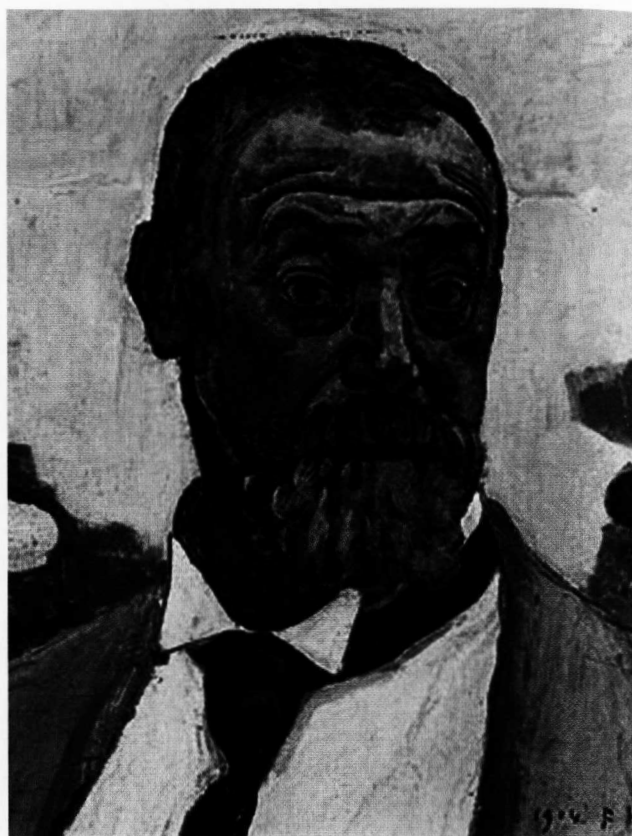


Disapproval and contempt are expressed through forms which are debated among experts. The expression which, according to some, seems to be common to the greatest number of cultures, is that which is recognisable for the curled lips (as seen with disgust) or for an asymmetrical smirk, with a corner of the mouth and a single eyebrow raised. Others maintain that it's the gaze which takes precedence, as it becomes haughty or shocked, almost as if manifesting the disbelief and alienation from the object of contempt. Darwin argues for a version in which the eyes are half closed and the gaze directed elsewhere, as a manifestation of the will to desire to hide a deplorable sight from view.

Disbelief/Scepticism



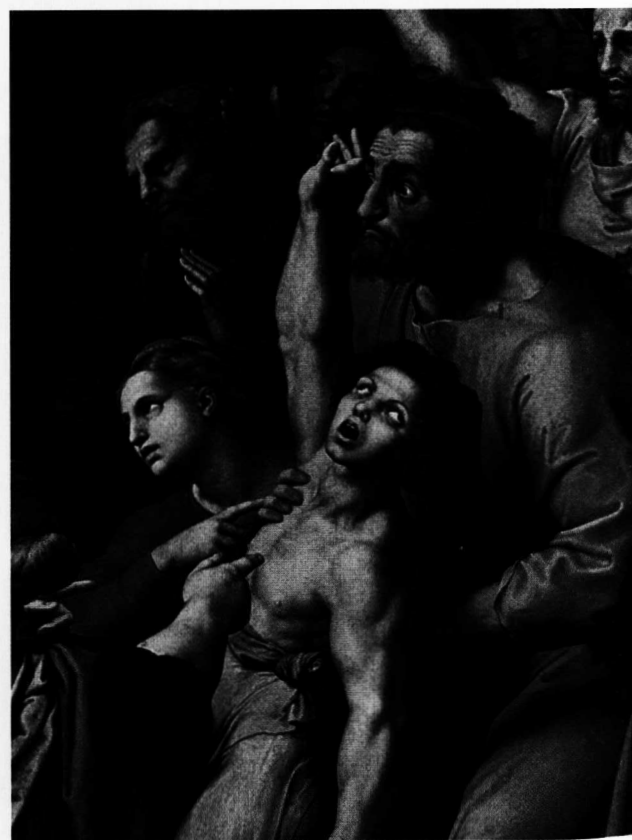
Caravaggio, Incredulity of Saint Thomas, 1600-01



Ferdinand Hodler, Self-Portrait, 1914



Simone Martini, Miracle of the Resurrected Child (detail), 1317



Raphael, The Transfiguration (detail), 1518-20

The face of disbelief and scepticism substitutes sentences such as "I have no clue what you are talking about", "I don't believe you", and "I can't believe my eyes". It's an intentional expression which belongs to the sphere of emblematic gestures. It is shown mainly through the raising of the eyebrows and the chin with a simultaneous frown, as with disgust.

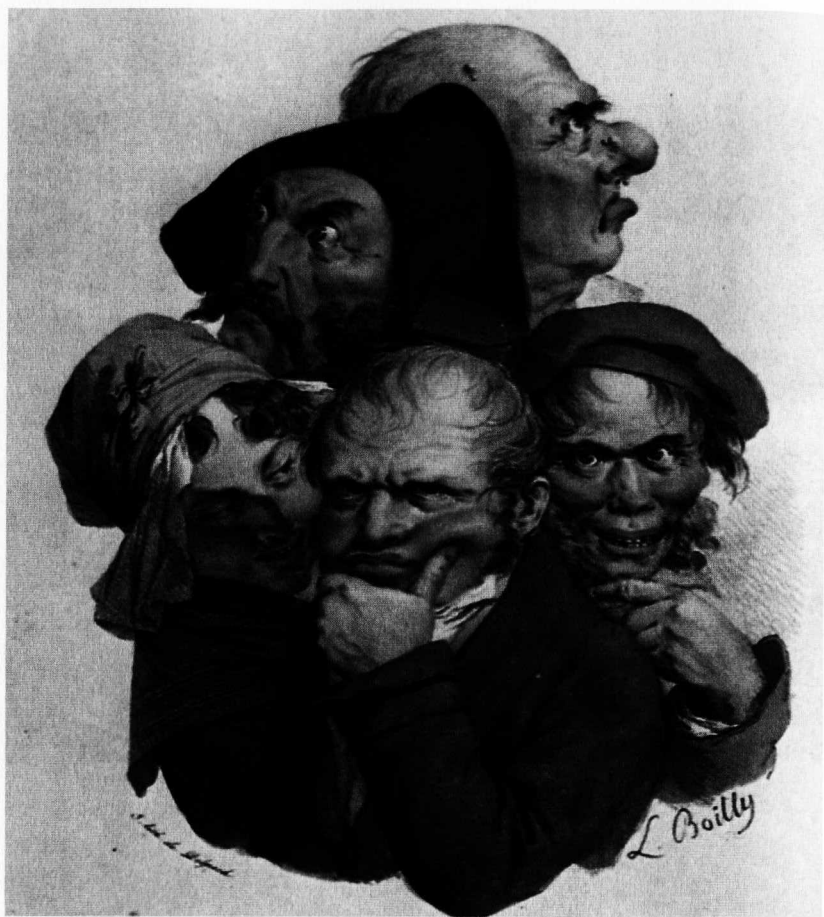
Disbelief and scepticism are different in the positioning of the eyes: wide open, to express shock, dull and empty, to indicate diffidence and disdain.



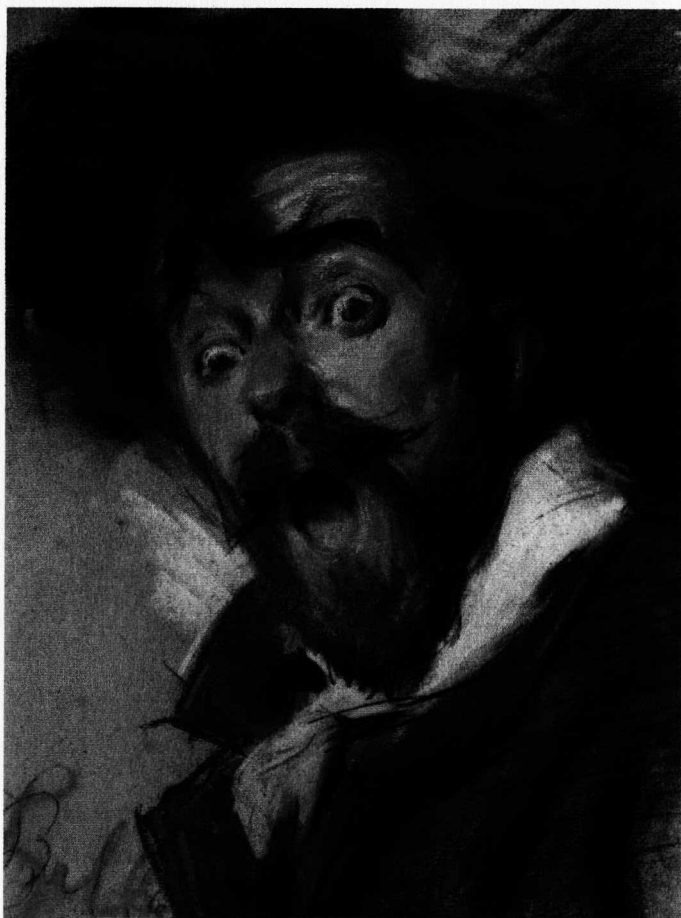
Expressive Grimaces

There is an almost unlimited variety of expressive grimaces. Many of them are closely tied to the culture in which they appear, or they have ambiguous meanings. On this and the following page, we offer a few of them, purely by way of example.

On subsequent pages, we'll cover more in detail those which, often responding to physiological functions, do not express emotions or states of mind but rather actions (coughing, blowing, kissing, etc.).



Louis-Léopold Boilly, The Grimaces, 1824-1825



Giacomo Balla, Autosmorfia (Self-Portrait), 1900



Egon Schiele, Self-Portrait, Grimacing, 1910



Expressive Grimaces

Along with expressions which *emphasize* an argument or which reinforce an emotional state, there are others still which are entirely involuntary and which often are inconsistent with the context. A few attitudes (sticking out one's tongues, making funny eyes, etc.) have a purely playful purpose.



Coughing / Sneezing

Coughing and sneezing are actions, response to purely physiological stimulations, in which facial muscles undergo considerable transformations.

Both situations are characterised, in their culminating phase, by the violent contraction and closure of the eyelids, of the wrinkling of the eyebrows and the nose, and by the greater or lesser opening of the mouth. When coughing, the

lower lip becomes more prominent, partially caused by the pressure of the tongue and the under part of the throat becomes hidden in part of the jaw. Sneezing is characterized by a preparatory phase in which the eyebrows rise and the forehead generates wrinkles which curve upward. As a consequence of coughing or sneezing, the eyes tear up.



Blowing



Piero della Francesca, The Battle of Heraclius and Chosroes (detail), 1452-66



Guido Mazzoni, Nativity (Madonna della Pappa), 1480



Sandro Botticelli, The Birth of Venus (detail), c. 1482-85



El Greco, Boy Blowing on an Ember to Light a Candle, 1575

The act of blowing is determined, on an expressive level, essentially by the contraction of two muscles: the buccinators and the orbicularis oris. The eyes are more or less closed, just as the cheeks are more or less puffed out, according to the intensity of the action. Frequently there is also a slight raising of the eyebrows.



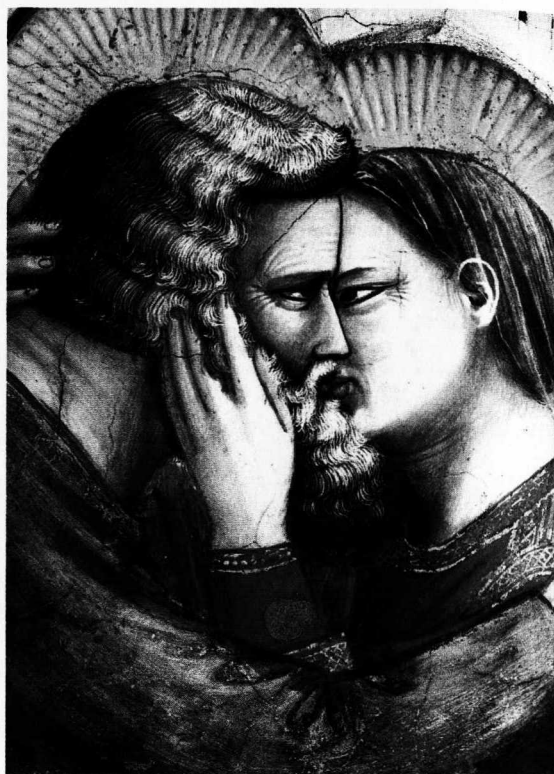
Kissing



Jean Baptiste Lecoquer, The Last Kiss (detail), 1820



Henri de Toulouse-Lautrec, The Kiss, 1892

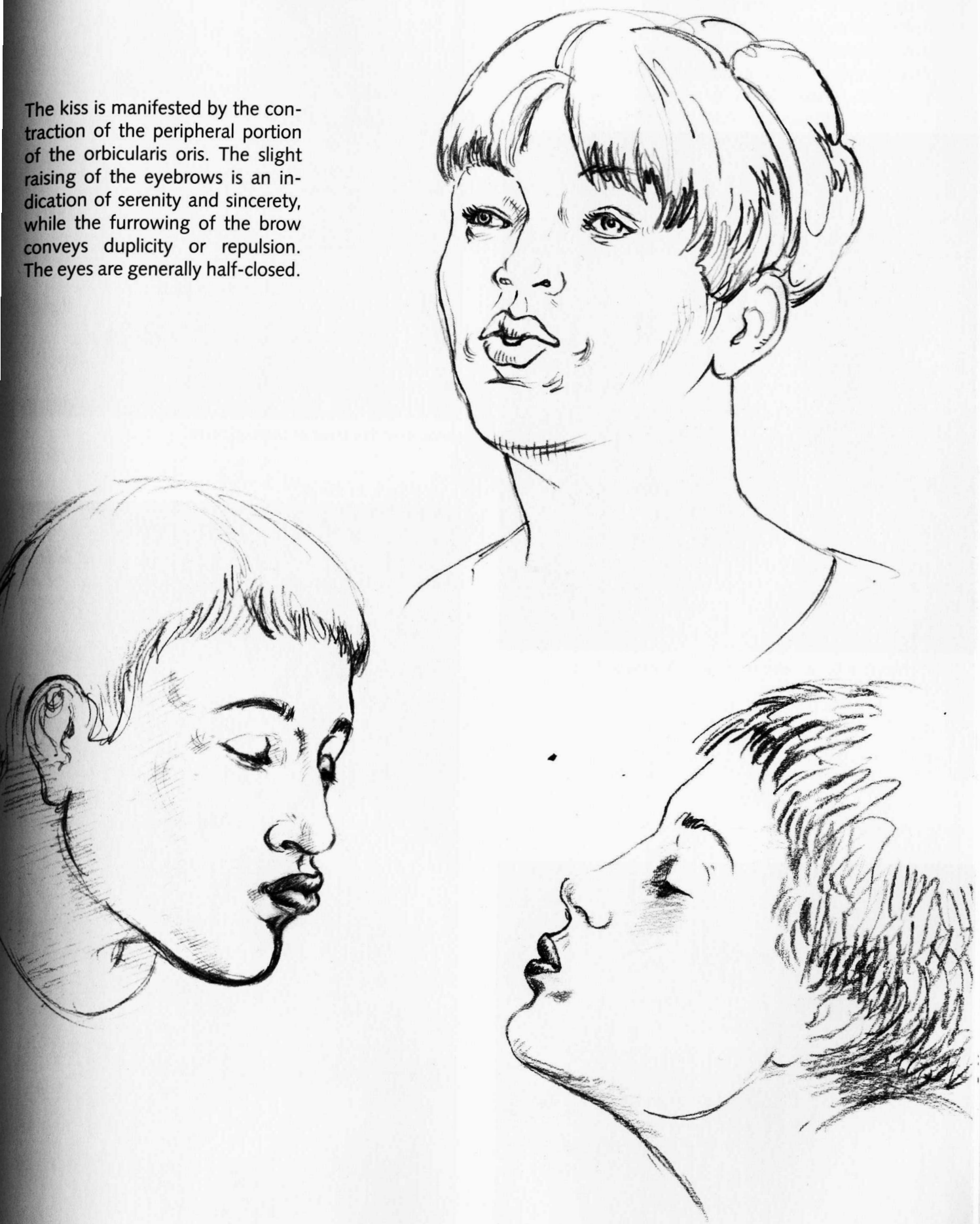


Giotto, Joachim and Anne Meeting at the Golden Gate (detail), 1303-06



Giotto, Kiss of Judas, 1303-06

The kiss is manifested by the contraction of the peripheral portion of the orbicularis oris. The slight raising of the eyebrows is an indication of serenity and sincerity, while the furrowing of the brow conveys duplicity or repulsion. The eyes are generally half-closed.



Physical Pain



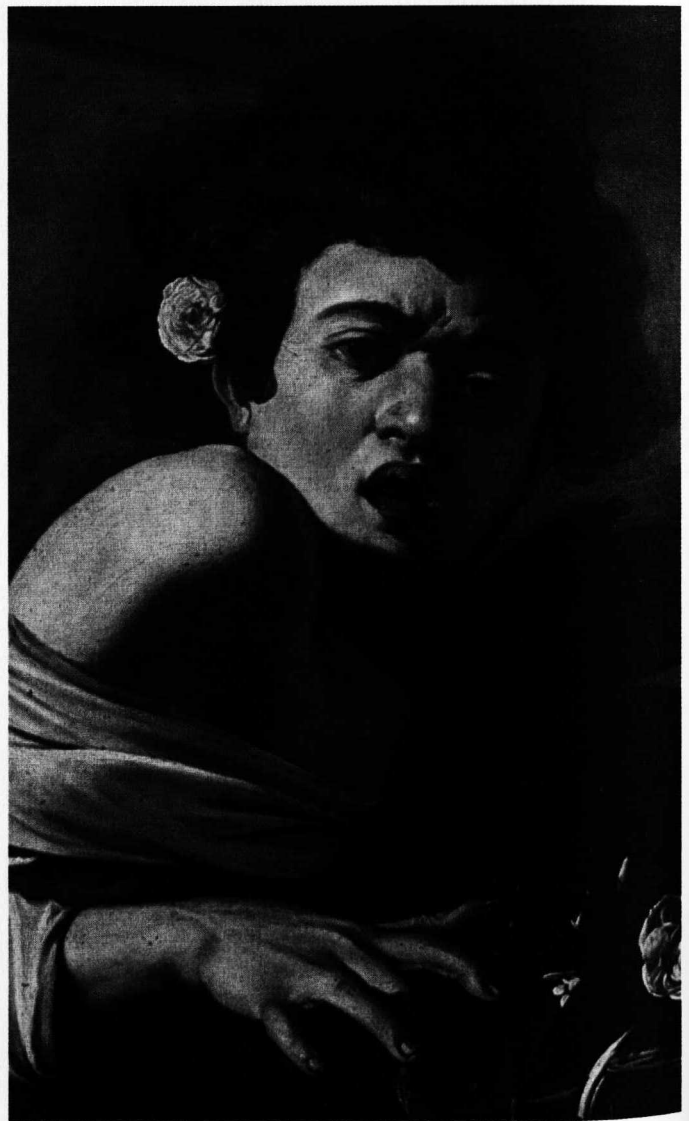
Francisco Goya, Self-Portrait with Dr Arrieta, 1820



José de Ribera, Prometheus, c. 1630

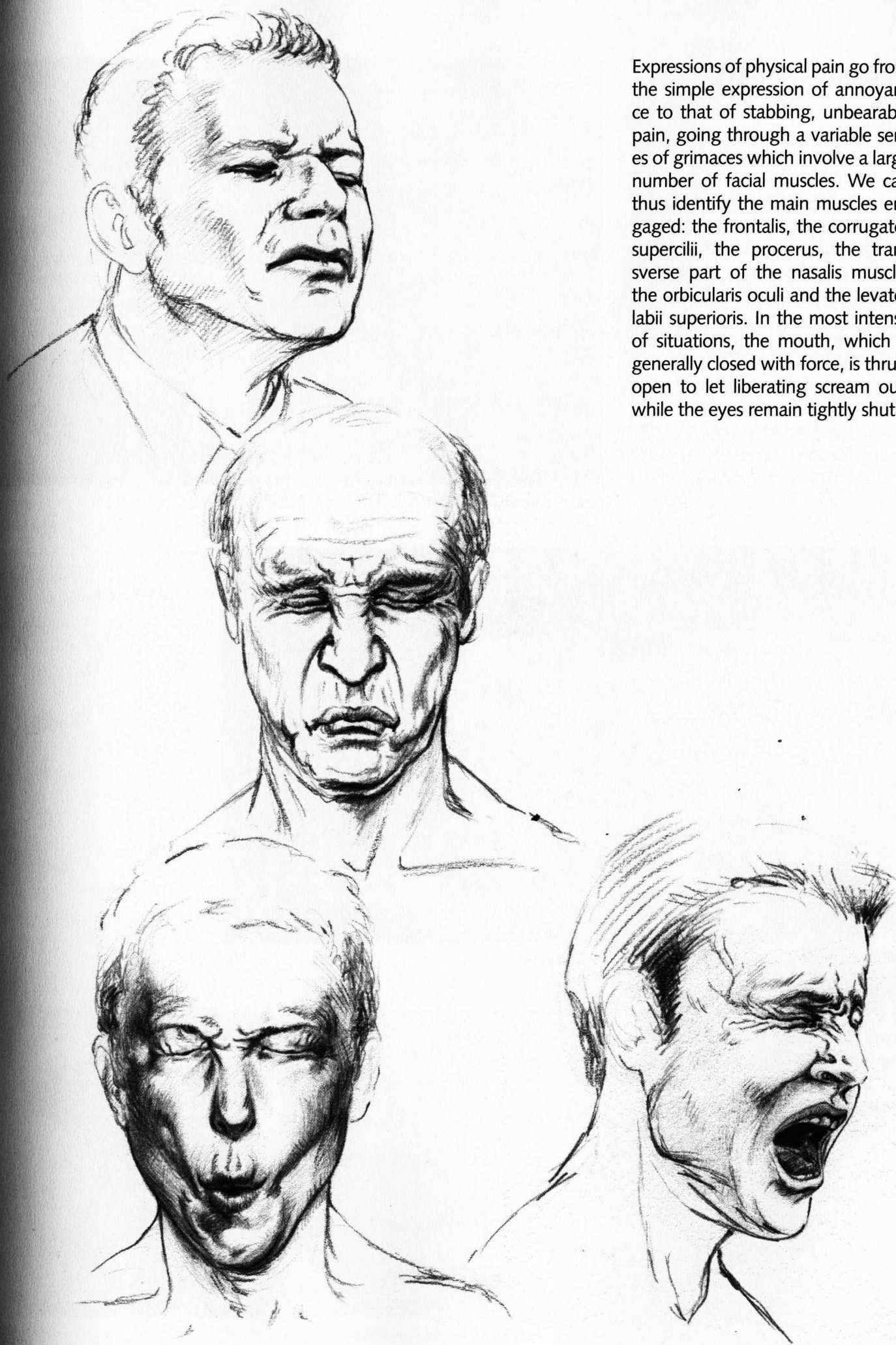


Guido Reni, The Head of Marsyas, 1618



Caravaggio, Boy Bitten by a Lizard, 1595-96

Expressions of physical pain go from the simple expression of annoyance to that of stabbing, unbearable pain, going through a variable series of grimaces which involve a large number of facial muscles. We can thus identify the main muscles engaged: the frontalis, the corrugator supercilii, the procerus, the transverse part of the nasalis muscle, the orbicularis oculi and the levator labii superioris. In the most intense of situations, the mouth, which is generally closed with force, is thrust open to let liberating scream out, while the eyes remain tightly shut.



Sleep/Death

In quiet sleep, the face's features are relaxed. The eyelids are, of course, closed, mostly by the drooping of the upper eyelid, following the relaxing of its levator muscle.

Unlike in sleep, in death muscles lose any sense of vital tone and are progressively released. The eyelids, shut or half-shut, moved closer together in a way that the lower lid rises upwards, lay idle and inert on the eyeballs sunken



Andrea Mantegna, Agony in the Garden, c. 1455



Gustave Courbet, Young Ladies on the Bank of the Seine, 1856/57

in their sockets. Similarly, the relaxed muscles of the mouth cause the opening of the oral cavity. For the same reason, this time in reference to the neck musculature, the head tilts backwards.



Ferdinand Hodler, Valentine Godè-Darel, 1915



Expression of the Five Senses



Pietro Paolini, Allegory of the Five Senses, c. 1630



Theodoor Rombouts, Allegory of the Five Senses, 17th cen.

The five senses are what allow us to connect with the world. According to the classification created by Aristotle, who defined them as different ways to perceive external reality, they're ranked as followed, according to degree of importance and refinement: sight, hearing, smell, taste and touch.

The actions put into place to communicate with the external world through our senses (eating, looking, caressing), just like the pure and simple reception of messages through our perceptive organs, give rise to a varied series of facial expressions. In the following pages, we'll present a few of the most emblematic ones.



Allegory of Hearing and Allegory of Sight: two paintings by Jan Brueghel the Elder, 1617

Looking



Albert Anker, Man Reading a Newspaper, 1878



Antonio Canova, Self-Portrait, 1790



Carl Spitzweg, The Poor Poet, 1839



Joshua Reynolds, Self-Portrait, c. 1747-49



Jean-Baptiste-Siméon Chardin, Self-Portrait with an Easel, 1779



There are numerous and diverse expressions linked to the use of sight. On this page, we've considered the visual effort required to focus on something, characterised by the squinting of the eyelids and the appearance of expressive wrinkles at the corners of the eyes (crow's feet), and the act of setting something in one's sights, in which the forced closure of one eye (helped by the contraction of the zygomaticus muscle) corresponds to the opening of the other.



Listening



Arnold Böcklin, Self-Portrait with Death Playing the Fiddle, 1872



Adolphe William Bouguereau, Woman with Shell (detail), 1885



Orazio Gentileschi, Young Woman Playing a Violin (Saint Cecilia), c. 1612

The expression of a person in the act of listening is very similar to those of attention and being alert. The gaze, however, is less direct and lively. The lips are half closed and the head is slightly tilted to the side. When audio communication is confused or not perfectly intelligible, the mouth opens more and the eyebrows furrow.



Smelling

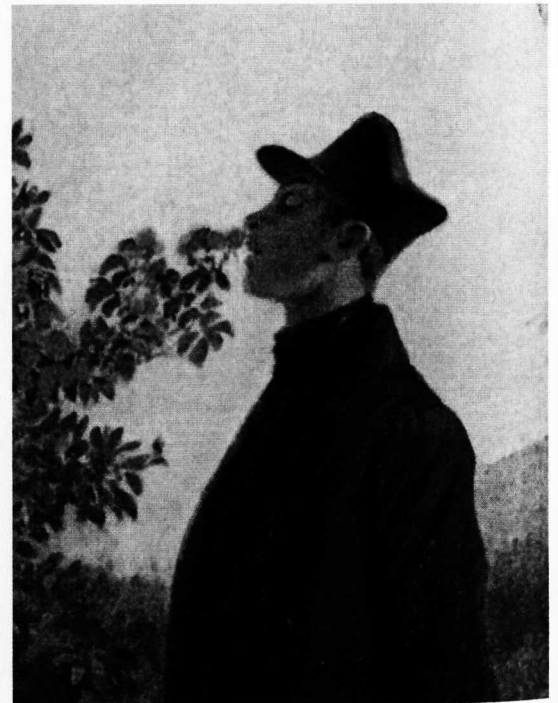
The act of smelling is manifested, of course, through the dilation of the nostrils. The head juts outward towards the object of *olfactory exploration*. The eyes close and the forehead lifts. Any unpleasant sensations lead to a wrinkling of the nose through the contraction of the transverse part of the nasalis muscle.



John William Waterhouse, *The Soul of the Rose*, 1908



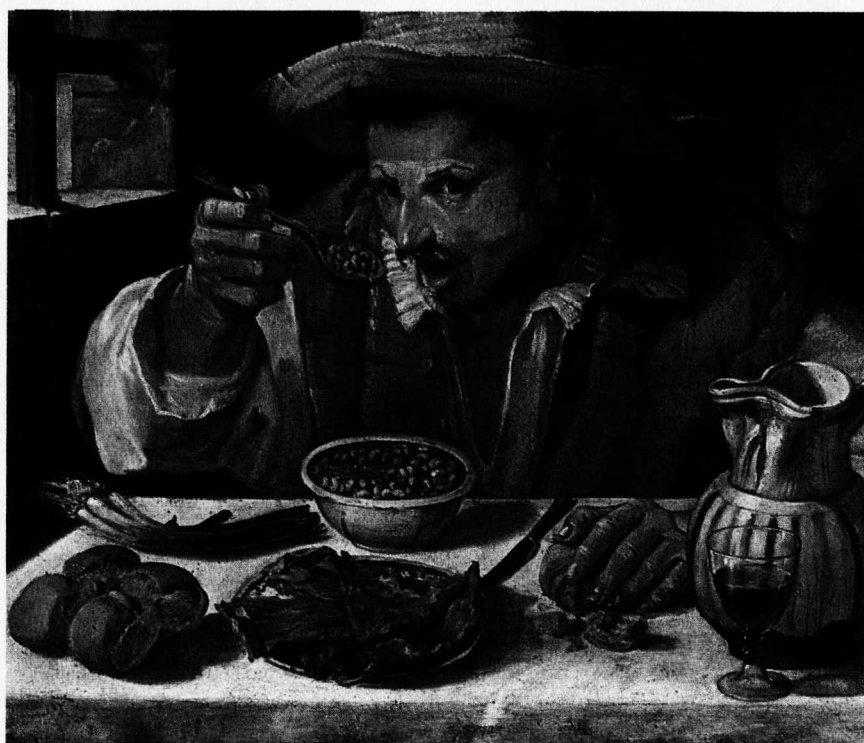
Luigi Russolo, *Profumo (Perfume)*, 1910



Carl Spitzweg, *Rose Scent Memory (detail)*, 1850



Tasting



Annibale Carracci, The Bean Eater, 1583

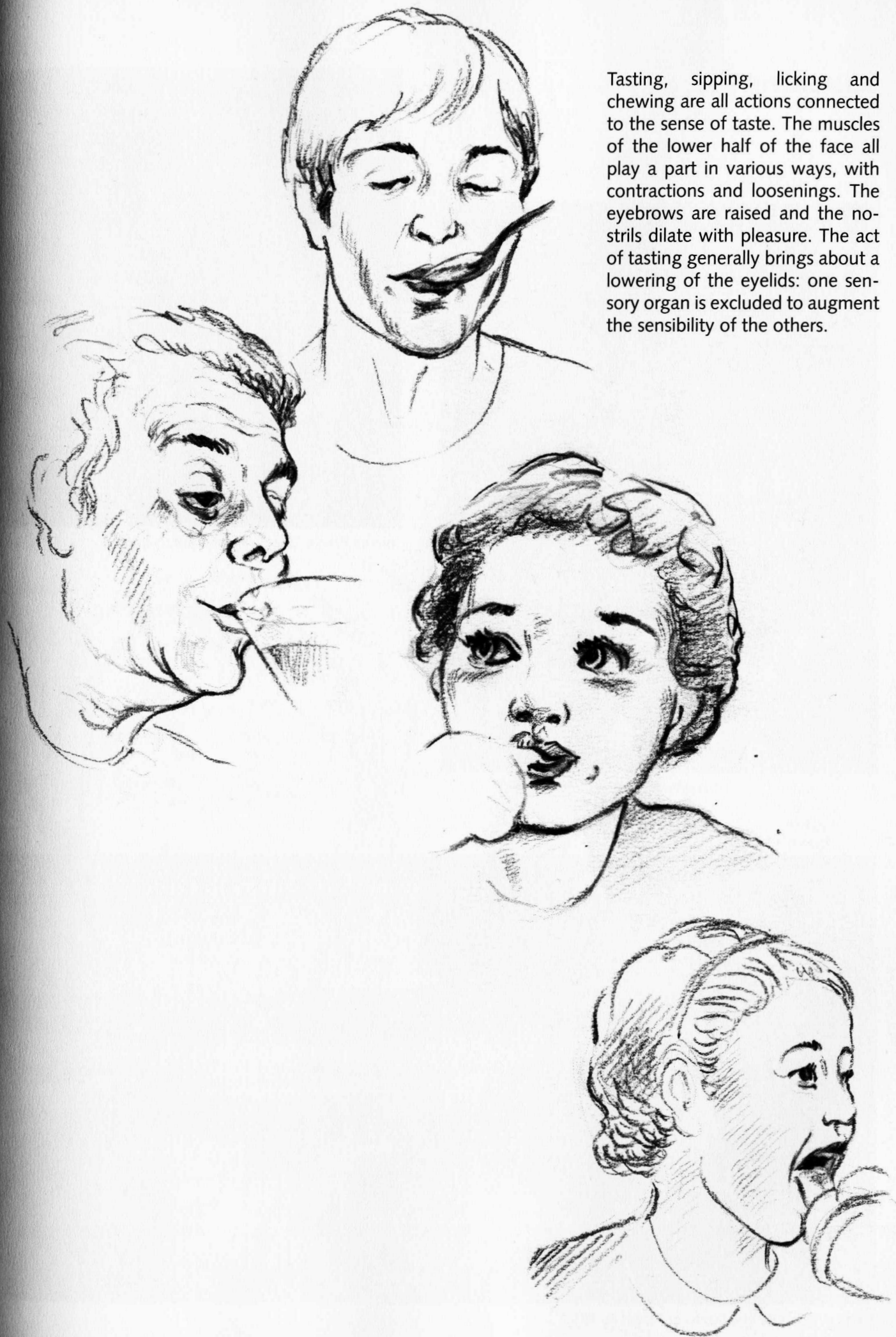


Peter Paul Rubens, Two Satyrs, 1618-19



John Everett Millais, Lorenzo and Isabella, 1849

Tasting, sipping, licking and chewing are all actions connected to the sense of taste. The muscles of the lower half of the face all play a part in various ways, with contractions and loosening. The eyebrows are raised and the nostrils dilate with pleasure. The act of tasting generally brings about a lowering of the eyelids: one sensory organ is excluded to augment the sensibility of the others.



Touching



Brueghel the Elder, The Parable of the Blind (detail), 1568



José de Ribera, The Sense of Touch, 1613-16



Pietro di Cosimo, The Death of Procris, c. 1500

The use of the sense of touch alone to distinguish one's surroundings leads to facial expressions characterised by a wrinkling of the forehead (mental effort), of a slight dilation of the nostrils and the parting of the lips (attention) and the inclination of the head to the back or to the side (as with listening).



7 MODIFYING EXPRESSIONS: THE VARIOUS AGES

In the previous chapter we analysed expressions according to emotions and various attitudes, separating them by genre or the physiognomy of the person. Now we'll look at other decisive factors which change the look of the face – aging first and foremost.

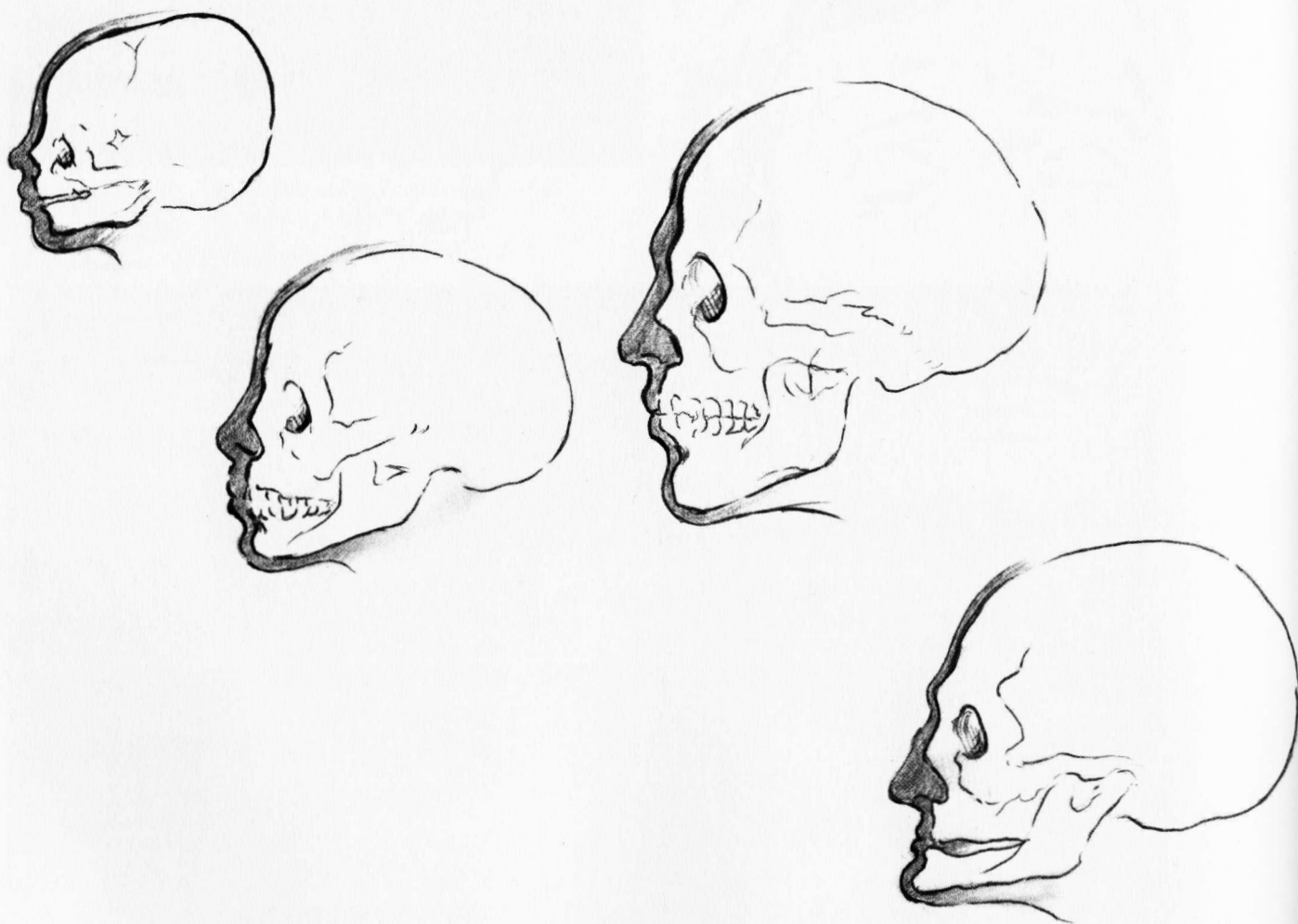
The specific qualities of facial expression owing to age vary greatly for two reasons: changes in the skull and the skin. Hair and body hair are also significant aspects of the face, but we can't consider them as 'structural' as the previous elements.

From birth to old age, the skull undergoes changes in its shape and proportions large enough that they can't be ignored by the artist. In

newborns, the cranium's dimensions dominate those of the face. As we grow, the proportions become more balanced as the nose and jawbone develop. In the elderly, on the other hand, the oral cavity sinks as we lose our teeth, making the chin appear less prominent; the jaw may atrophy until it reaches a third of its height, and the cranial vault tends to flatten.

These changes – the thinning of bones and, in particular, the loss of teeth – change the structure upon which facial expressions are shaped.

The skin is a continuous, thick, elastic and resistant membrane whose main role is essentially that of protection. Its thickness varies according to the individual, but the





average measurement is 1-2 millimetres while the minimum drops below half a millimetre. Incredibly thin on the eyelids and on the external part of the ear, the skin can reach a maximum thickness of 4 millimetres. Women have thinner skin than men, and as they age it tends to wear thin.

The skin's colouring depends on one particular pigmentation, melanin, which is found in the deepest layers of the epidermis. It can vary greatly due to age, gender and, in particular, ethnic backgrounds, which are often classified according to skin colour.

A few people, specifically those with fair skin and blond hair or even more so, those with red hair, often have small yellowish marks

spread over the skin, especially the face, commonly called freckles.

The pinkish colouring of newborns' skin is due to its subtlety, which allows the capillaries to "breathe". That gradually disappears with age and the increased thickness of the skin. In the elderly, however, undergoing the effects of general 'regression', skin becomes thin again, wrinkled, and has a darker, more yellowish tone.

Wrinkles. The skin is no longer a smooth surface, replaced by a large quantity of grooves or folds, the products of the movement of underlying muscles and joints.

In facial expressions, these muscular folds accentuate a person's mood or attitude. Such folds are at first temporary, but later on, with

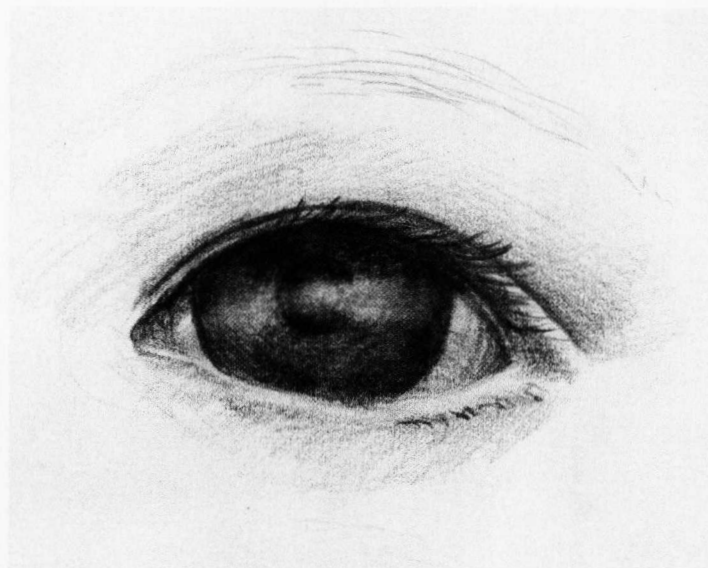
the force of repetition, they are slowly imprinted on the skin. They become increasingly accentuated, eventually becoming permanent in our more mature years, that is, from around 40 years old.



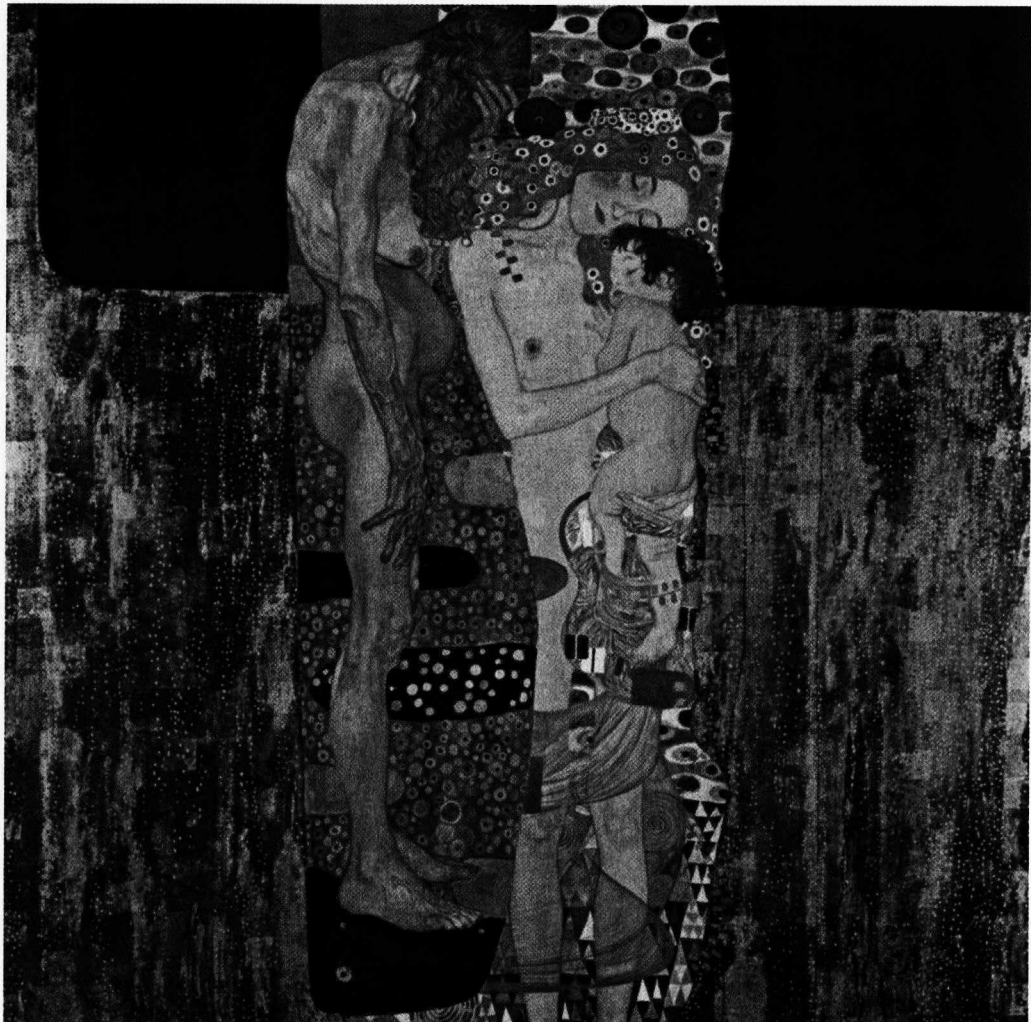
Seniors' wrinkles also come from the progressive disappearance of the elastic fibres of the skin and of the subcutaneous adipose tissue. The skin of an elderly person, no longer taut, is too abundant relative to the surface it is supposed to cover, thus creating wrinkles. It's typical to see creases on the forehead, the eyelids, the corner of the eyes, the cheeks and the sides of the mouth.

Changes to one's expressions due to age also come from less obvious, though equally influential, factors such as: the carriage of the head, interpersonal attitudes and the gaze – all elements which imperceptibly characterise growth, maturity and decline.

A child's innocent gaze, with a large iris and dilated pupil, then gives way to the vivacious, luminous face of an adolescent, and evolves into the small iris of the detached gaze of a mature adult, finally becoming the cloudy, almost fluid look of old age.



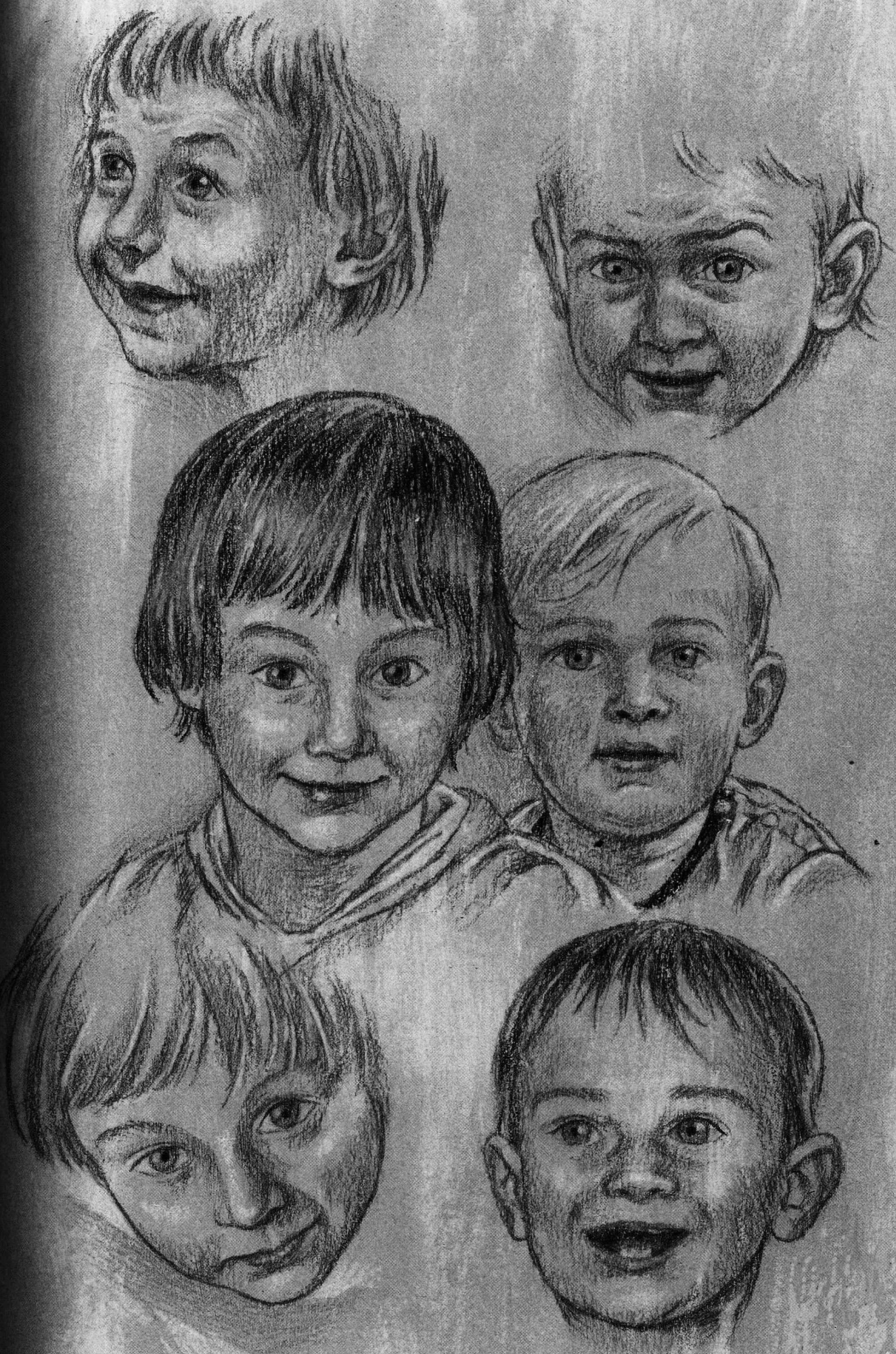
The various ages



Gustav Klimt, The Three Ages of Woman, 1905







from two to three years old



from three to four years old



from five to seven years old



from ten to fourteen years old



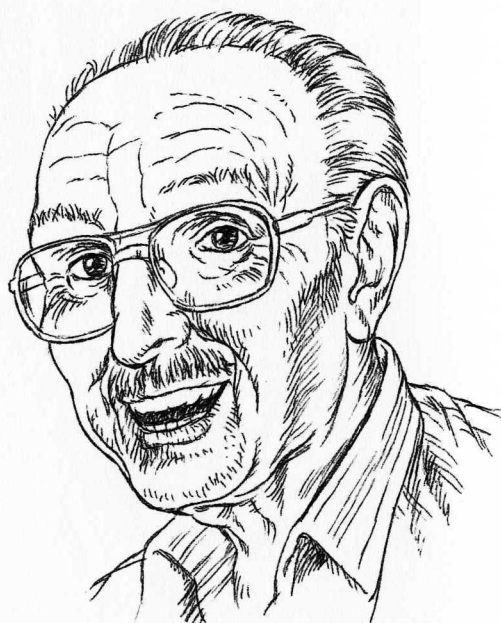
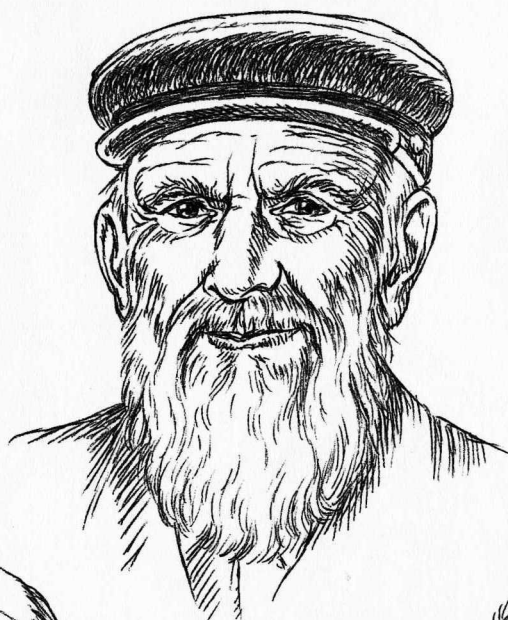


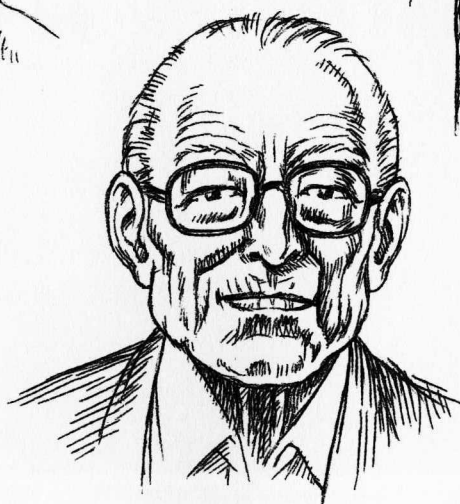






sixties/seventies





Comics

A story presented by a comic strip, in its most typical form, is made up of vignettes which can be compared to the frames of a film: they're not intended for contemplation, rather they are to be integrated into a narration made up of sequences of a pre-established length.

Therefore, by means of a few lines, the cartoonist gives life to immediately comprehensible images. To do so, s/he carries out an operation of synthesis: s/he discards the inessential descriptive indicators, those which aren't absolutely necessary for a quick reading of message to be communicated, referring to simplified patterns of facial expressions (see: *Exercises – Drawing Expressions*) As a result, characters' physical aspects and facial expressions are



Winsor McCay, *Little Nemo*, 1905



Two drawings by Guido Crepax which represent the physiognomy and the emotions of Valentina in just a few descriptive strokes (1971)

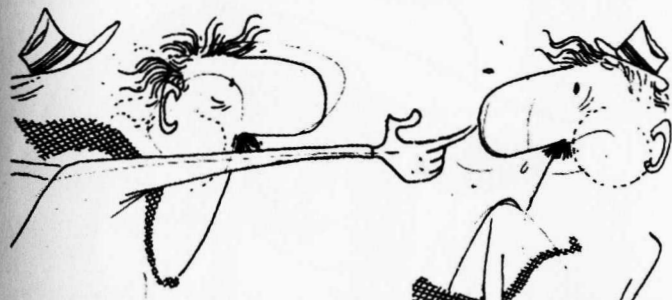


The expressive eyes of Diabolik, a character created by Angela and Luciana Giussani in 1962

accentuated: in most cases, their faces end up taking on caricature or mask-like connotations.

These sketching patterns become a code in which two categories stand out: that of "functional expressions" and that of "indicatory expressions". The first category includes attitudes presented identically by all characters when they find themselves in a similar situation, such as the expression of anger, fear, etc. On the other hand, "indicatory expressions" include facial displays which characterise an entirely stereotypical type of character.

Cartoonists and graphic illustrators of unrealistic illustrations have spontaneously adopted a



Drawings taken from *La Tecnica del Fumetto*, Ikon Editrice, 1991



The cynical, cruel face of Zanardi, a character by Andrea Pazienza in a drawing from the 1980s

code of schematic symbols which are a simplification of human facial expressions (for example: hair on end = fear, rage; furrowed brow = bad mood; closed eyes = sleep, trust; mouth open wide = surprise; etc.). In addition, in the physiognomy of the characters, a particular application of "metonymy", a rhetorical figure which expresses the moral aspect through the physical (for example: the charming hero, the evil "bad guy" with a repulsive face, the blond damsel with snow white skin, etc).



Robert Crumb, facial details from *La Genesi*, 2009



A vignette by Muñoz from the 1980s



Tex drawn by Magnus in 1996, Sergio Bonelli Editore



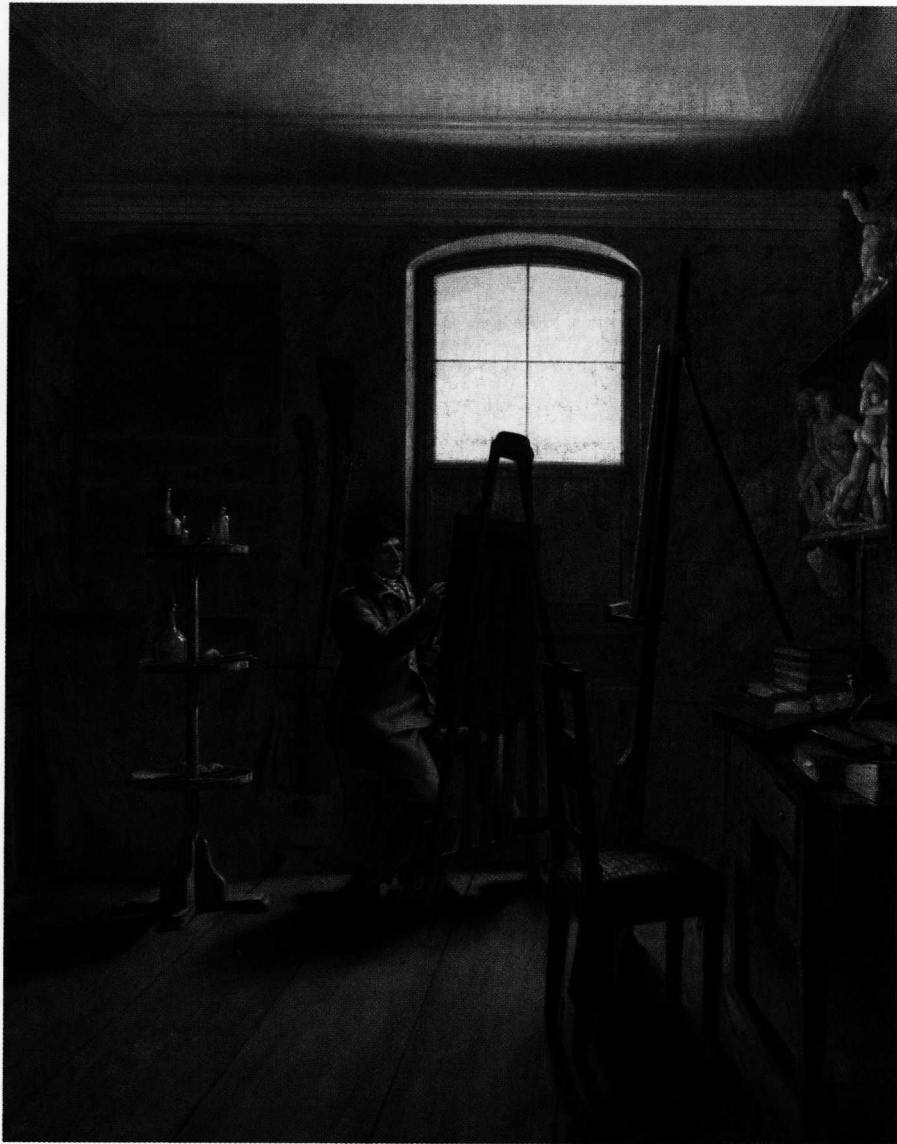
A few vignettes by Marco Soldi for *Julia*, Sergio Bonelli Editore, 1998



Dylan Dog in a drawing by Corrado Roi, Sergio Bonelli Editore, 2001



Giuseppe Bergman by Milo Manara, 1978



Georg Friedrich Kersting, Gerard Von Kügelgen in his Studio, 1811

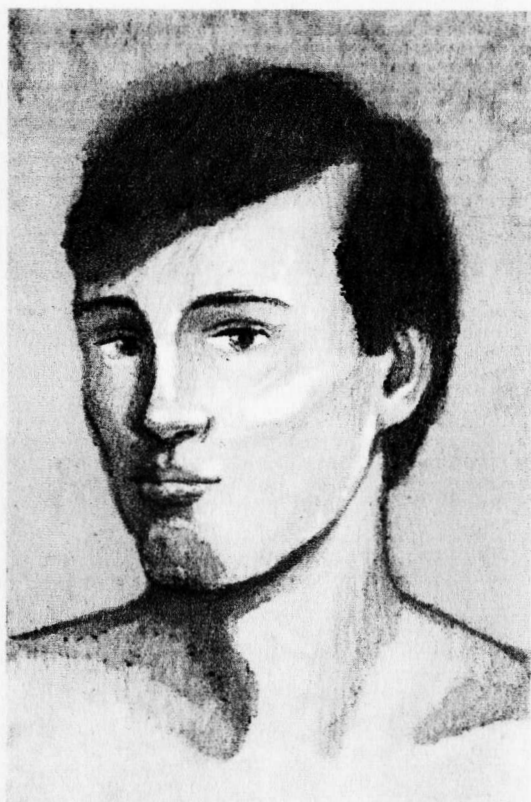
Expressive variations in an image

Emotions represented on a face aren't enough to make an image expressive. Expression also is found in the formal qualities of the image itself and the means which by which they are reproduced or represented are not secondary at all.

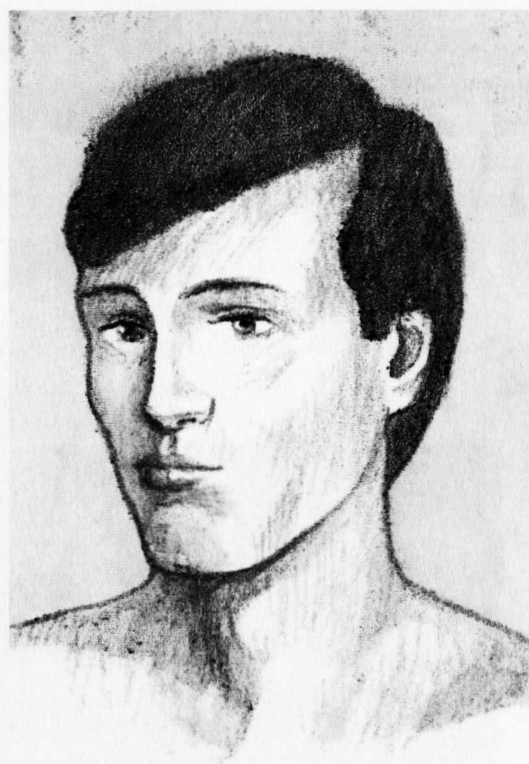
Artists were aware of the expressive possibilities of shapes and colours well before Expressionist theory defined this aspect in painting and in film. By the 1700s, what Jonathan Richardson wrote was already common knowledge: "If the subject be grave, melancholy or terrible, the general tint of the colouring must incline towards brown, black, or red, and gloomy; but be gay, and pleasant in subjects of joy and triumph [...]"

Generally if the character of the picture is greatness, terrible, or savage...or even the portraits of men of such characters there ought to be employed a rough, bold pencil; and contrarily, if the character is grace, beauty, love, innocence, etc., a softer pencil and more finishing is proper." (*An Essay on the Theory of Painting*, p. 155 and 166, London 1725).

Thus given a face, with fixed expressive characteristics and fixed physical features (local variations of physiognomy, which maintain the overall formal qualities, give rise to caricatures), we can experiment with expressive variations, such as technique, colour and lighting.



Front lighting
- harsh shadows (attention)

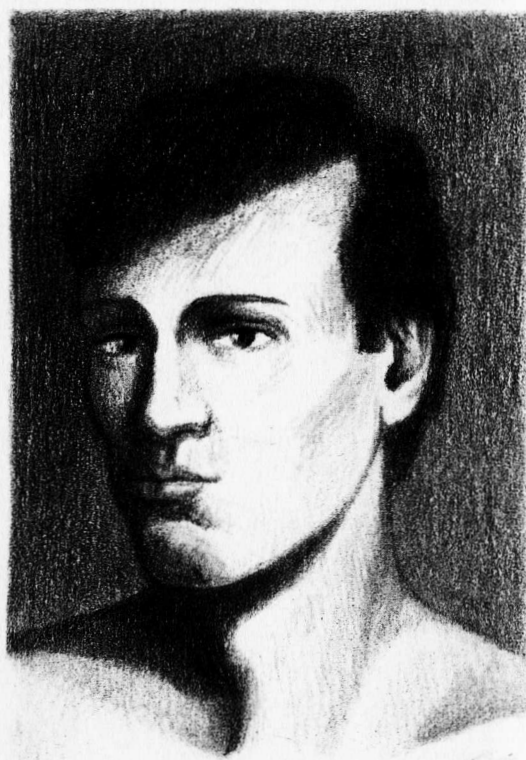


Diffused lighting
- soft shadows
(serenity-satisfaction)

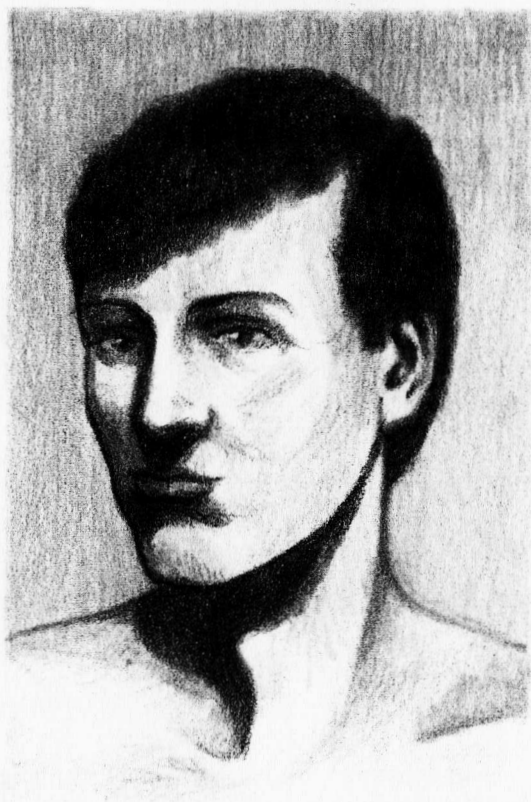
Lighting

Another expressive variant of an image of a face is that of the light. As painters, photographers and directors know quite well, the lighting is always the result of a specific communicative plan. It's a perceptual lighting effect and can be classified according to its various sources. As such, we have front, side, diffused, acute and back lighting. You can create "warm" atmospheres with the use of soft, intense lights, or "cold" atmospheres (icy white or bluish lights), daytime (high, solar lights) or night-time atmospheres (low-muted lights). You can also create unique effects, for example, by isolating details (a part of the face) or by angling light from different sources.

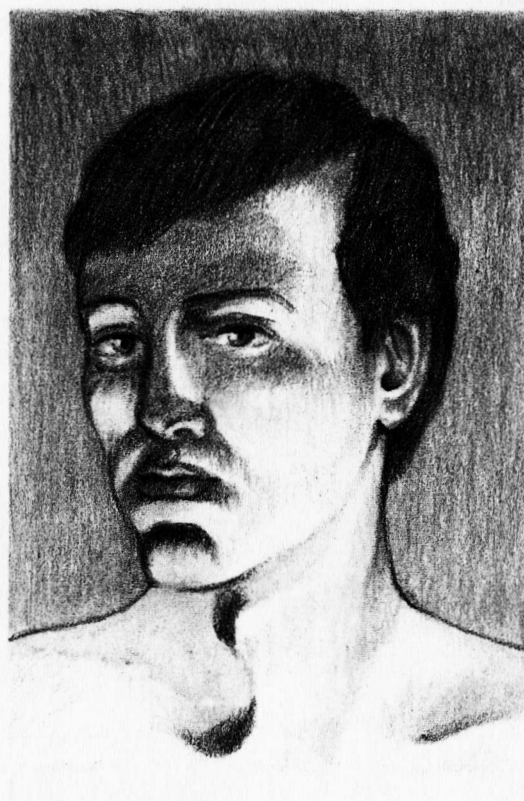
Front: reflecting almost all the light, shapes become flat and surfaces bright. Diffused: this uniform type of lighting produced by multiple sources reduces chiaroscuro con-



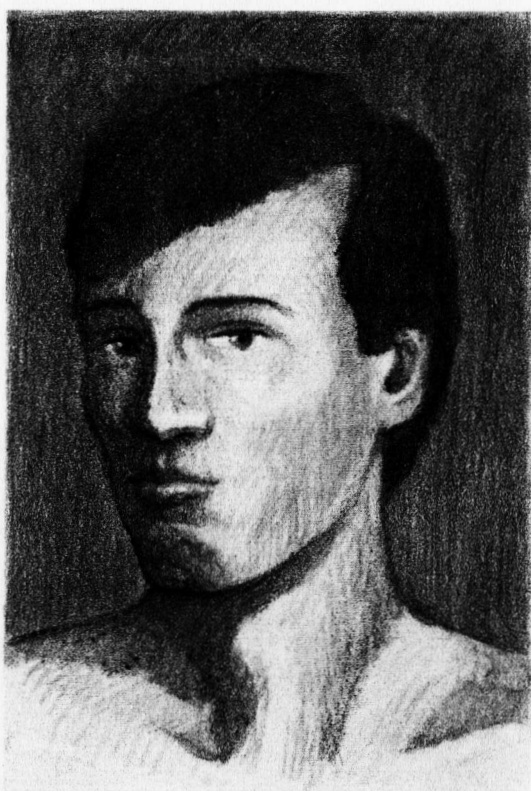
Acute lighting
- net contrast of light/shadow (emotion)



Side light from above
- *natural shadows (strength-displeasure)*



Side light from below
- *unnatural shadows (drama-mystery)*



Bassa luminosità
- *penombra con lueggature (calma-incertezza)*

trast and softens the plastic transitions between facial features. Acute: highlights the smallest variations along surfaces, carving deep shadows and articulates the convexity of the head.

Side: produces contrast between light and shadow which brings out the plasticity and volumes of the subject.

Backlit: makes the subject a dark, opaque figure; volume dematerialises into a flat shadow; from the side, the profile becomes a distant silhouette and a bit melancholy. Lighting can also change according to its brightness. This contributes the degree of clarity, the intensity of the light. In the examples provided here, figure 3 shows low lighting, while the other figures are all brightly lit. The quantity and quality of the light (a combination of specific factors) thus determine the expressive atmosphere of a portrait.

Giovanni Colombo, Portrait of the Artist as a Young Man, mixed media

Expressive sequences

The recognition of a determined expression always comes in its culminating phase; the intermediate phases escape our immediate deciphering because they are extremely short-lived and do not connote clear, unambiguous signals. From the first appearance of motion in the facial muscles up to the arrival at the expressive apex, a few seconds might pass,

at times just a few fractions of a second. In this short time span, the face changes rapidly and takes on fleeting poses.

To study the phases of development of a given expression, experts have used photography (starting in the 1800s) and, more recently, film or video.



Joy/Laughter



Anger/Rage



Surprise/Amazement



Sadness/Crying

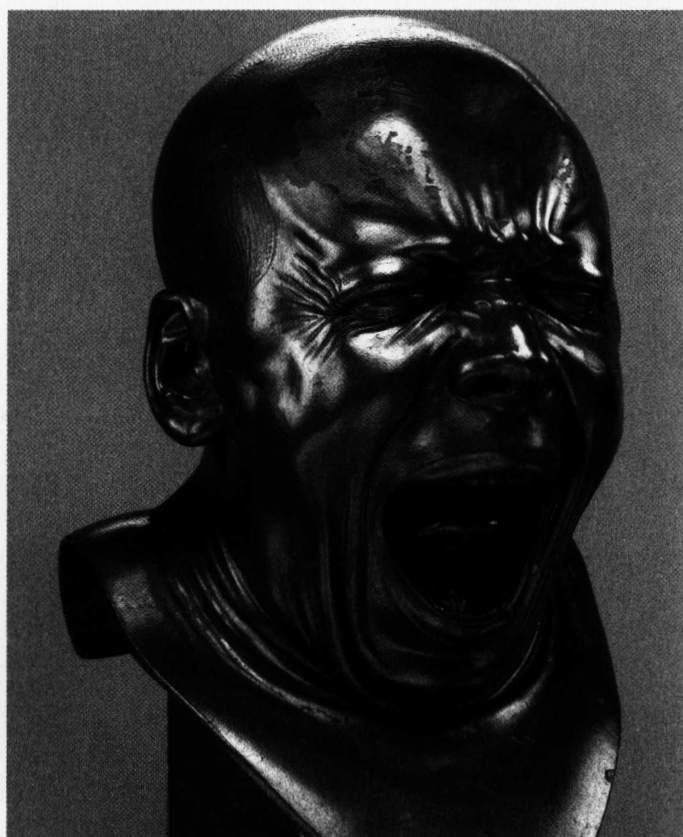
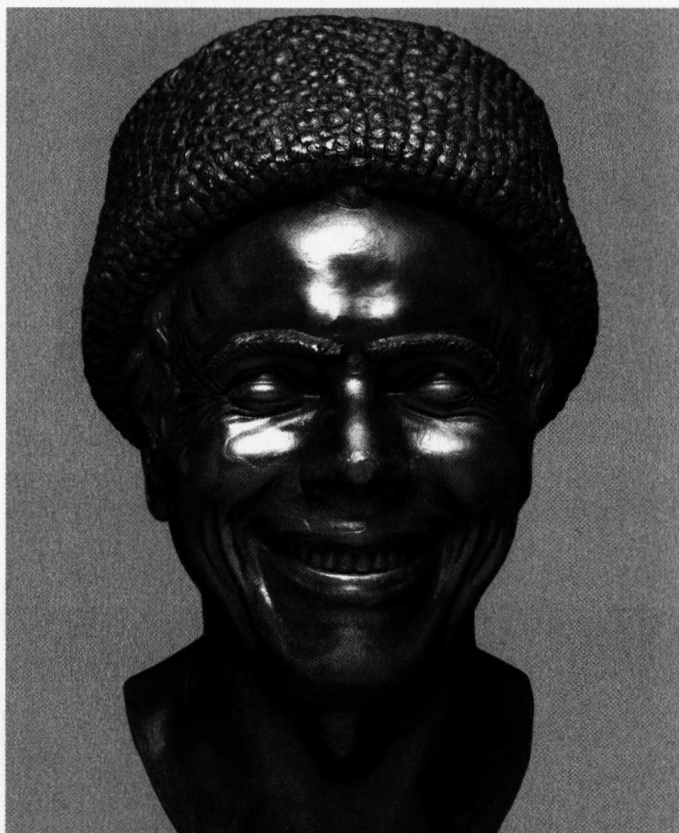
Even those who are interested in the study of facial expressions for artistic purposes should grapple with such techniques for recording reality, so as to gather those facial signals which suggest a certain type of emotion even before it reaches its maximum intensity, or to identify the intermediary stages which unite different expressions. In amazement, for example, one passes from an expression of attention to that of

surprise in a few short seconds. While crying, the face first becomes melancholy, followed by an expression of increased suffering. The examples provided here have been made by selecting a few meaningful stills from short films. The sequences obtained have then been altered with the same digital processing software.

Expressions in the busts of Franz Xaver Messerschmidt

Franz Xaver Messerschmidt (1736-1783), an Austrian sculptor, piqued the interest of scholars for his creation of "character heads", sixty or so sculptures in lead, stone or wood and subject to various interpretations.

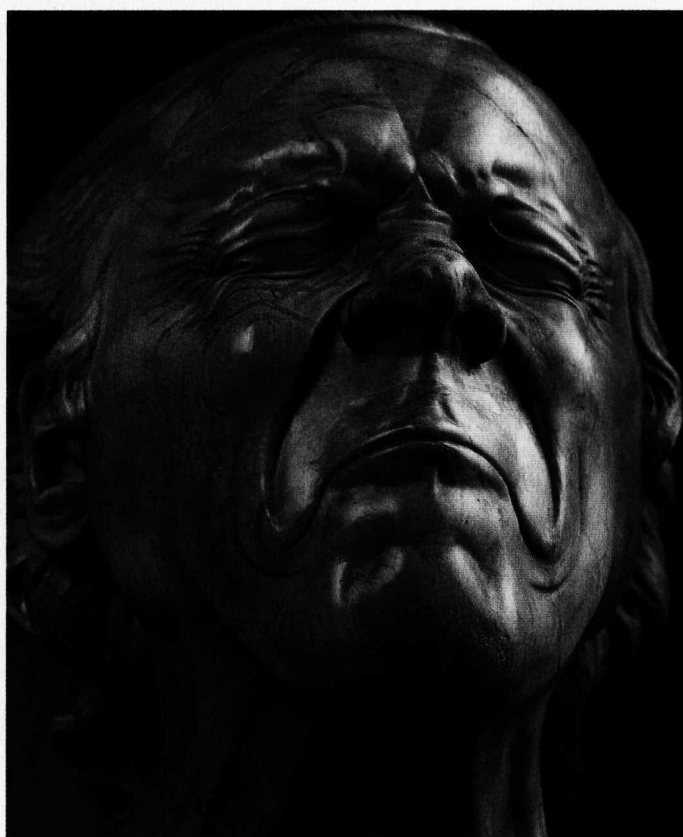
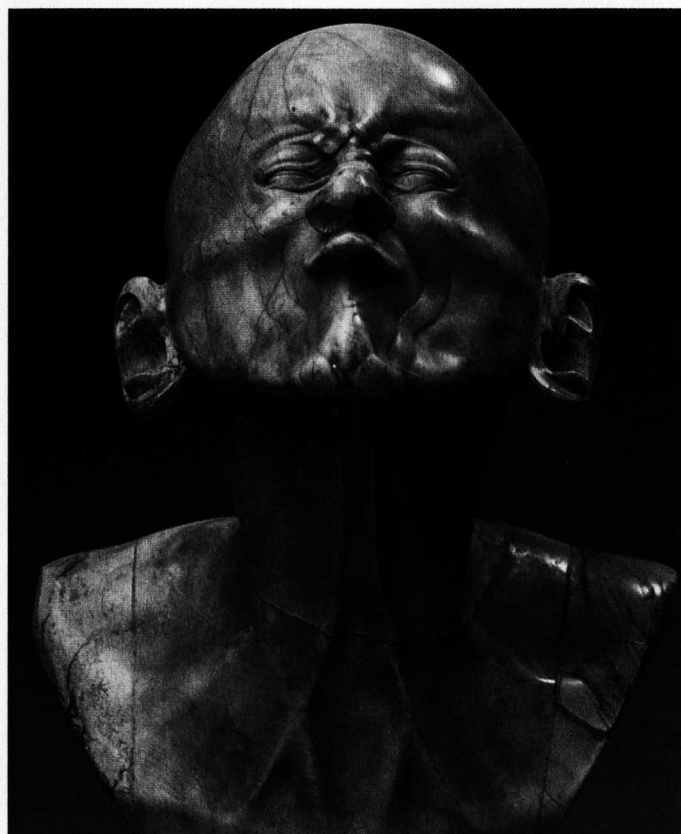
For our purposes, we're not interested in the artistic and psychological interpretations which various researchers have given them, only the results obtained by the sculptor.



He began working on his "character busts" starting in the 1770s. These sculptures were never commissioned, being rather works that sprung from his own creativity and inspiration.

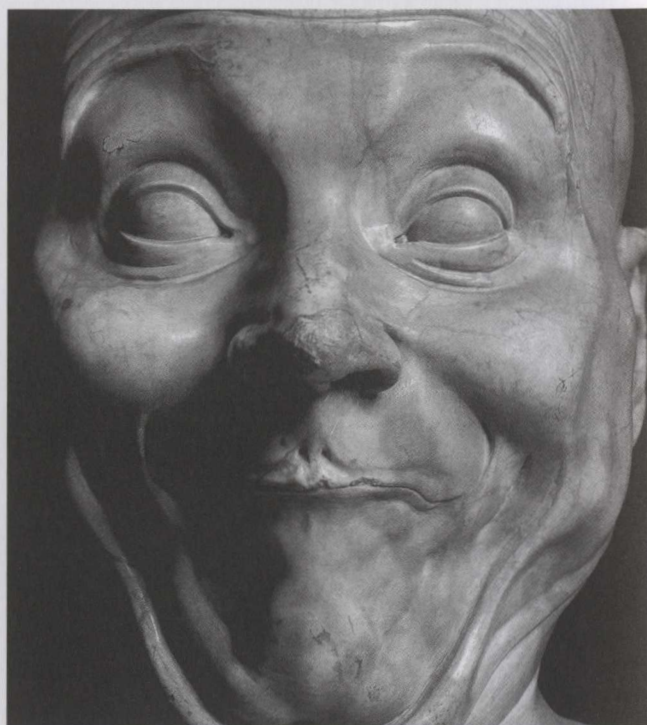
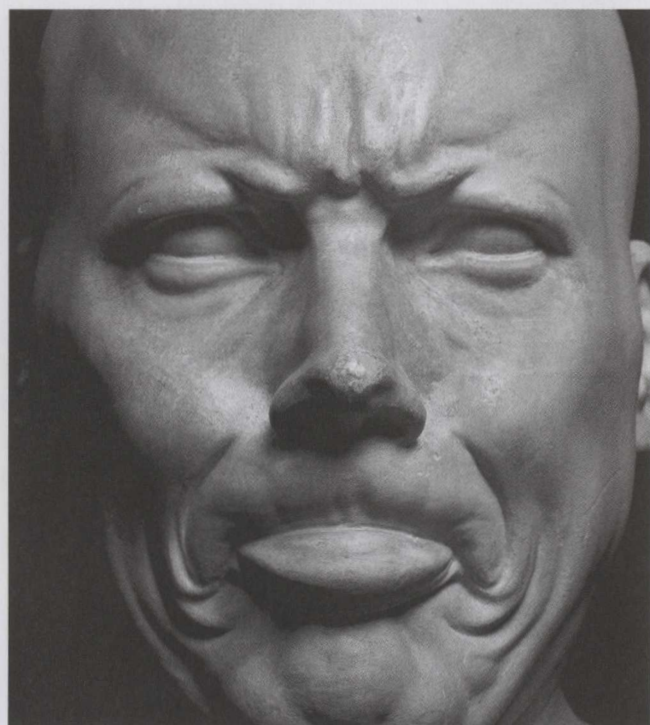
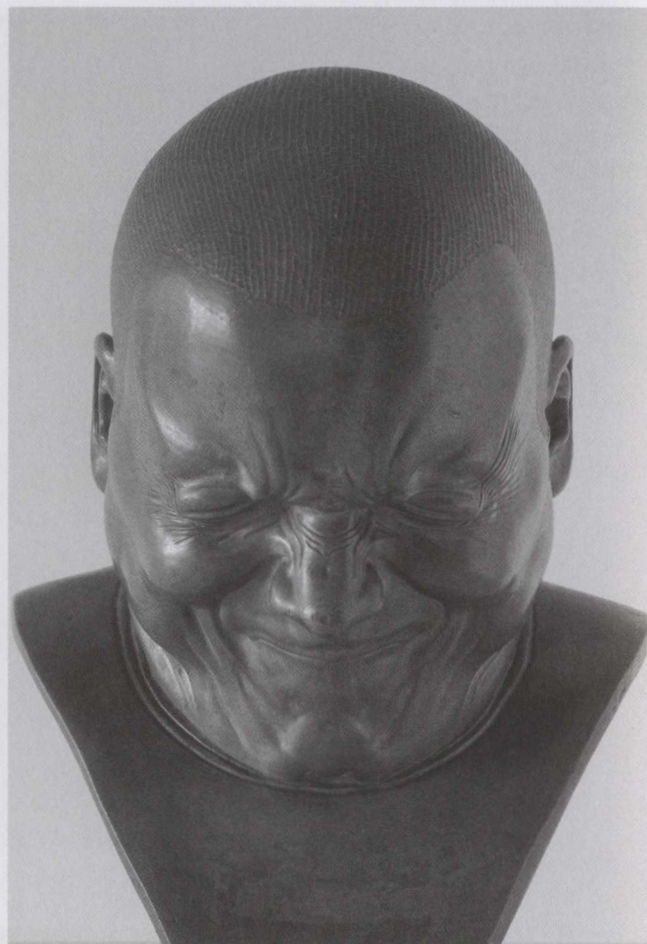
We have detailed information from the period in which he was working on these character busts, thanks to an account of the visits paid him by Friedrich Nicolai, in whom the artist often confided. Messerschmidt's busts seem to be self-portraits, carried out in search of authentic expression.

At that time, his personal and professional life had taken a turn for the worse: his psychosis was increasingly present, isolating him from society and from academic committees. His artistic production and virtuosity didn't cease, however, and his search for his own face's expression continued right into his schizophrenia.



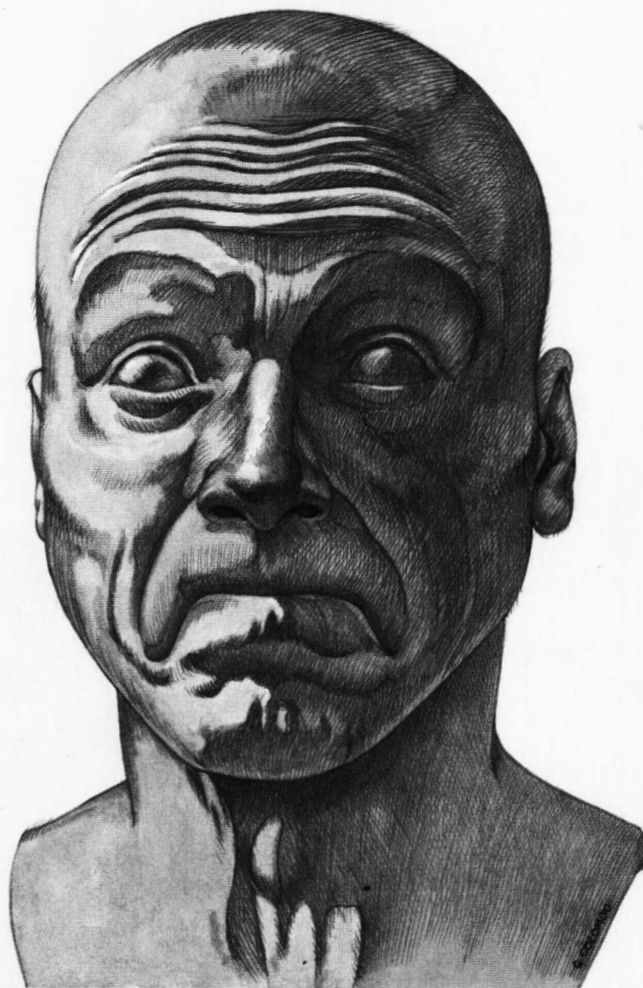
The mouth and lips are a central element in his work. In a few, tightly-shut lips indicate the fear of draining away into infinite space, while in others they indicate an attempt to block the influence of demons. From the period immediately following his death to the mid-19th century, there were numerous exhibitions showing the series of busts which would eventually bring fame to their creator. The names which were attributed to the individual figures are linked to an interpretation according to which he considered them studies of "character" or representations of "human passions".

Contrary to the line drawn by Charles Le Brun, it wasn't so much the representation of affection which interested Messerschmidt as much as an effort to render the changes in the face in response to various experiences. That which the sculptor intended to represent was the change in the relationships between facial muscles as they performed different functions, such as yawning, laughing, sleeping, etc.

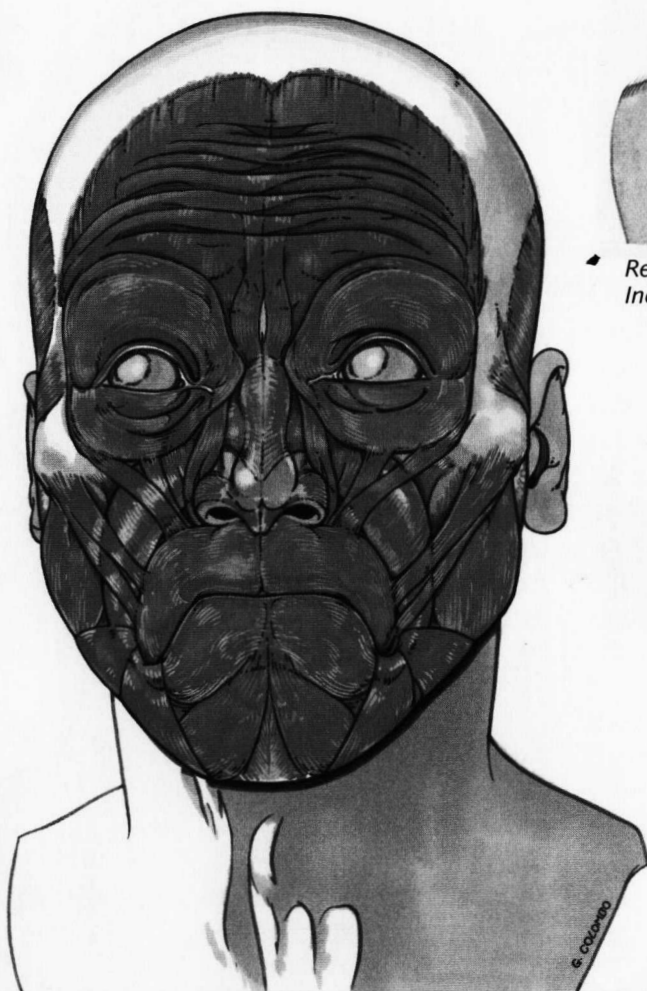


Deconstruction of a sculpture by F. X. Messerschmidt

Putting aside the precision and relevance of the titles given by contemporaries to the busts for this chapter, in such denominations we find expressions which are rather unusual and in certain cases, such as the "The Incompetent Bassoonist", even contradictory. For this reason, one of the authors of the book has taken this expression and examined it in depth, making it the subject of study and graphic representation for the 3rd year exams in anatomy at the Accademia di Belle Arti of Brera. This expression is a unique fusion of two facial-muscular attitudes. Before trying to define it, we'll take a look at which cranial muscles interact to create it.



• Reproduction of F. X. Messerschmidt's bust, "The Incompetent Bassoonist", c. 1770



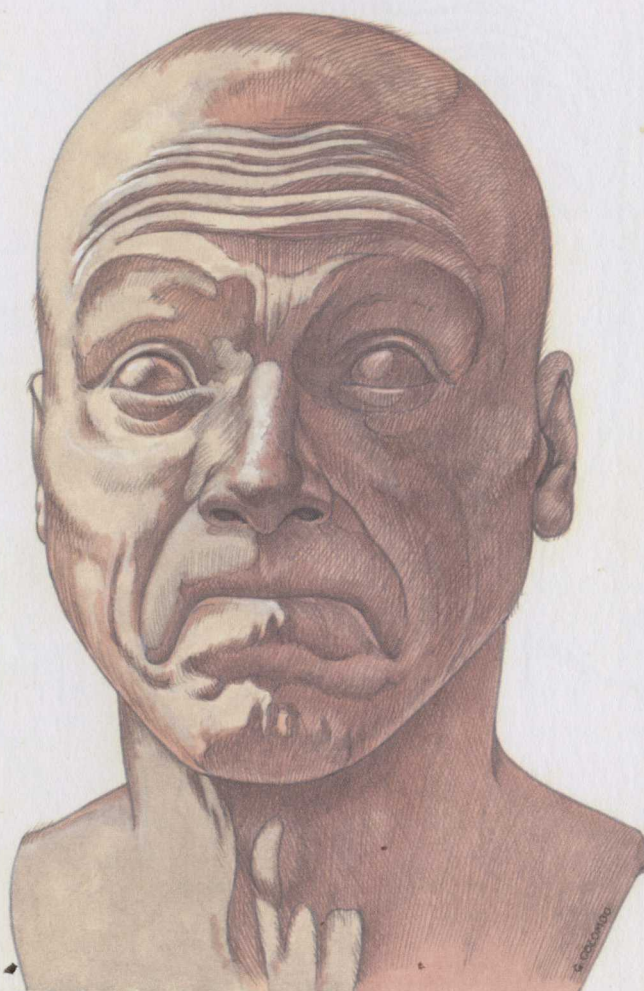
Superficial facial muscles

Deconstruction of a sculpture by F. X. Messerschmidt

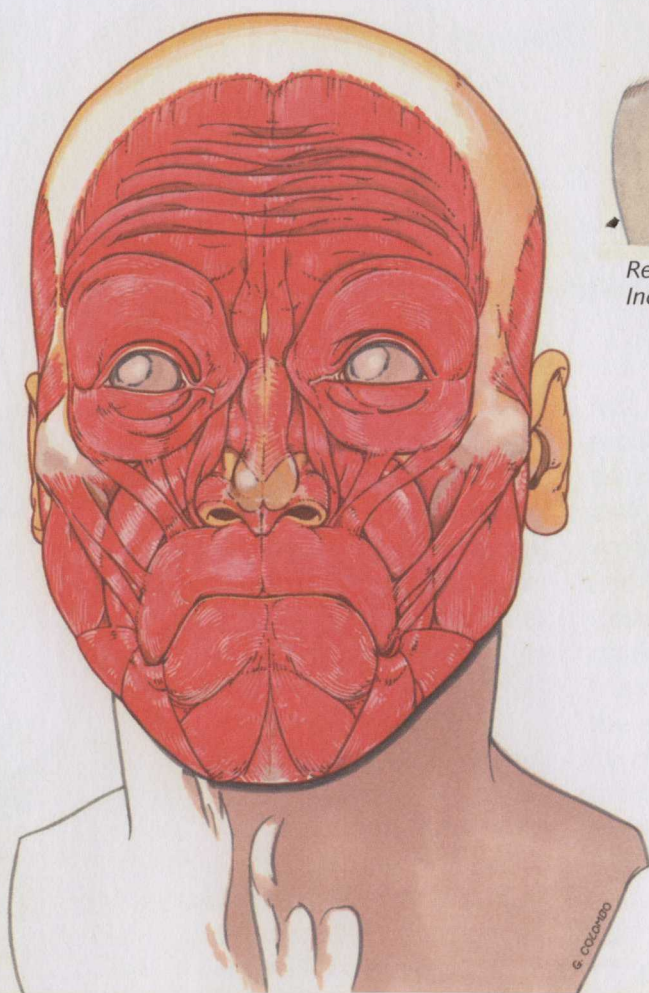
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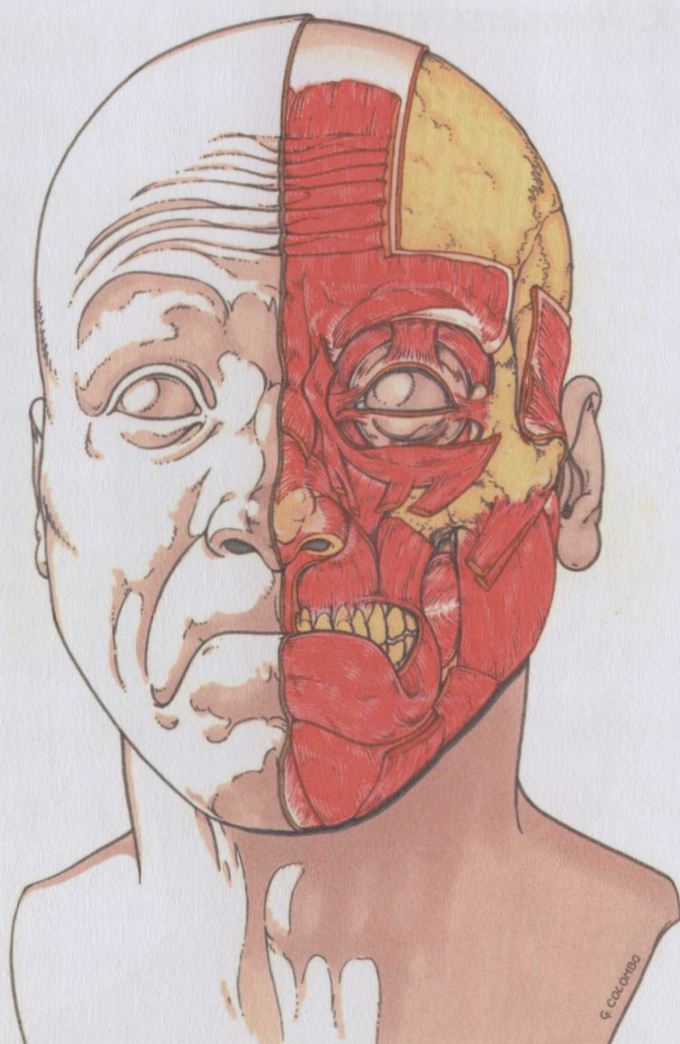
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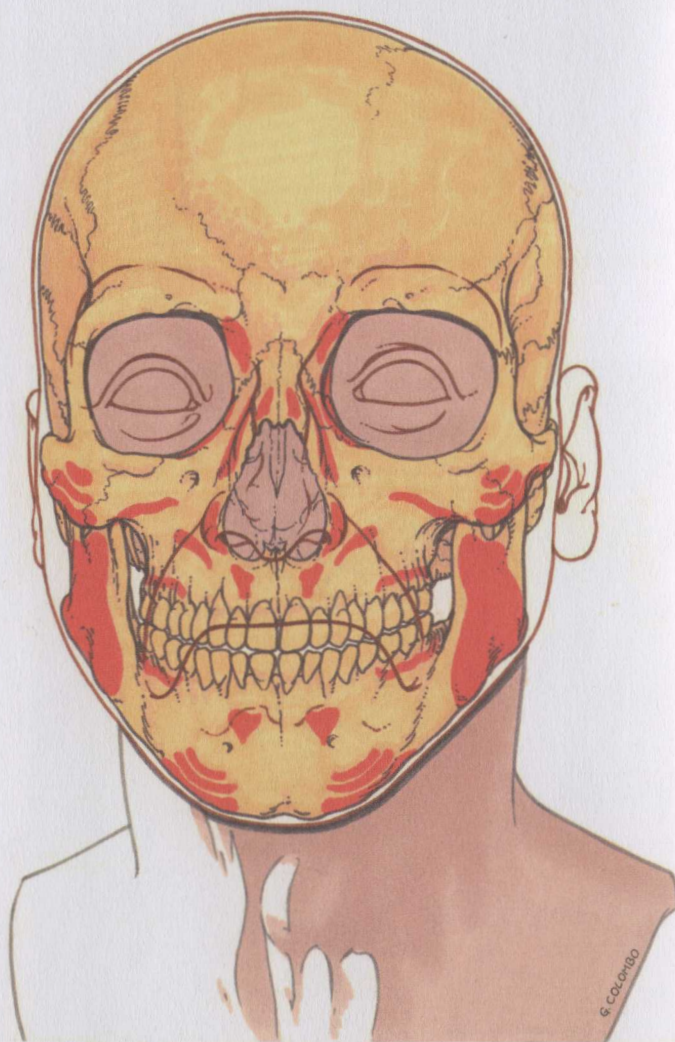


Superficial facial muscles

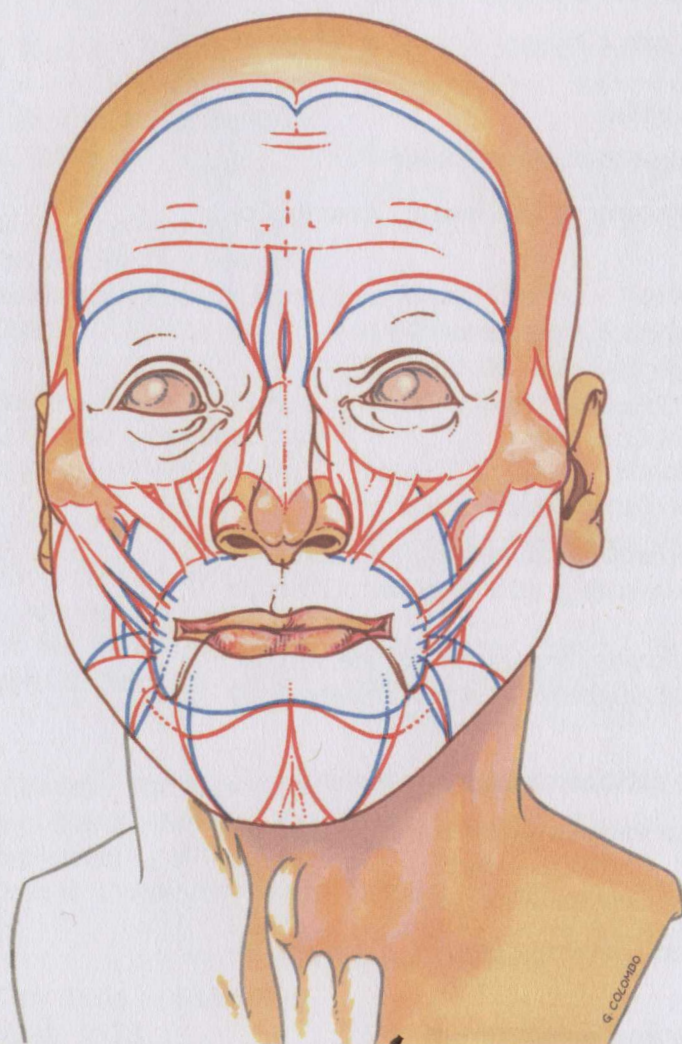


Sectioned superficial and deep facial muscles

The expression on the upper part of the face (amazement or startled fear) is due in large part to the maximum extension of the frontalis muscle accompanied by the extension of the procerus. These two are joined by the orbicularis oculi (orbital portion), whose upper half is extended upwards. The zygomaticus (both major and minor) and the levator labii superioris (including the alaeque nasi) are extended and follow the movement of the muscles of the lips. The buccinator muscle compresses the mouth, dilated with air, pushing it towards the orbicularis oris of the lip, puffing it up. The depressor anguli oris, bringing the buccal rim down with his maximum amount of concentration, seems to express disgust or displeasure. This same action is followed with the risorius muscle and the depressor labii inferioris.



Attachment of muscles to the skull



Facial muscles in action (red outlines) and at rest (blue outlines)

Below this, the mentalis, contracting, lifts the skin of the chin and produces wrinkles. Lastly, the central part of the orbicularis oris closes the oral cavity: folding the lips inward and forcing them up against the teeth, their outer edges disappear. Meanwhile, its outer part extends downward following the buccal rim.

Obviously, in a face's expression, all the muscles combine and interact with each other, but the previous analysis has revealed a contradiction. If the upper part of the face expresses amazement, the lower part is not consistent. In

fact, more than an expression, it produces a grimace. This is due to an attempt to expel air from the oral cavity (to blow out) which is immediately repressed, forcefully and stubbornly, by the maximum closure and curvature of the buccal rim.

It is here that we can demonstrate the sculptor's interest in the study of the effects of signalling on the face, rather than representing human passions; this is without considering, among other things, the psychotic aspects already present in this piece, realistically titled "The Incompetent Bassoonist".